GREATER TORONTO AREA 3Rs ANALYSIS
SOCIAL ENVIRONMENT TECHNICAL
APPENDIX - SCHEDULE H

**DRAFT - NOVEMBER 1993** 



Ministry of Environment and Energy

### GREATER TORONTO AREA 3Rs ANALYSIS SOCIAL ENVIRONMENT TECHNICAL APPENDIX - SCHEDULE H

Prepared by Hardy Stevenson and Associates for Fiscal Planning and Information Management Branch Ministry of Environment and Energy

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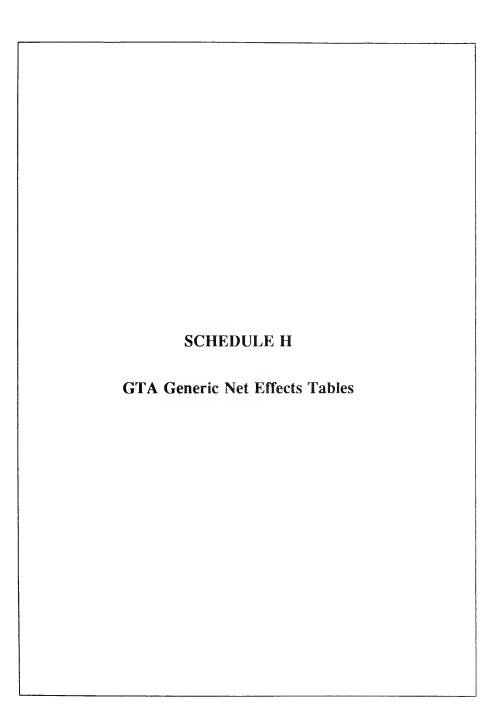


#### GTA 3Rs ANALYSIS SOCIAL ENVIRONMENT TECHNICAL APPENDIX

#### LIST OF SCHEDULES

SCHEDULE H GTA GENERIC NET EFFECTS TABLES







## GENERIC COMPONENTS NET EFFECTS TABLE H1.1

MUNICIPALITY: GTA
CRITERION: Potential Local Community Impacts

System Indicator

: Residential Existing : Potential Effects on Residents

	***		Commonent Not Effects
Component Category/Components	Potential Effects	Mittigation/ Ennancement	Component for Energy
Garbage Collection and Disposal			
Curbside Collection of residential garbage from single family dwellings Collection of residential garbage from multi-family units	· No effect	· Mitigation not required	. No effect
Residential Recycling and Collection			
Curbside collection of Blue Box materials     Expanding curbside collection     Collection of bins of recyclables from multi-family units     Drop-off depot for multi-family residents not serviced by recycling     Drop-off depot for rural households	· No cifeet	· Mugation not required	· No effect
Residential Leaf and Yard Waste Collection	. No effect	· Mituation not required	. No effect
Curbside collection of leaf and yard waste     Drop-off depot for leaf and yard waste		0	

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting			
Backyard composter distribution programs Large 3-bin composting units distributed to apartment and co-operative housing complexes	· No effect	· Mitigation not required	· No effect
Other Residential Waste Diversion (IIHW, Toxic Taxi, Pilot Wet/Dry, White Goods Collection, White Goods Drop-Off, etc.)			
Special curbside collections of Christmas trees     Special and weekly curbside collections of	· No effect	· Mitigation not required	· No effect
white goods  Drop-off depots for white goods  Special curbside collection for bulky			
items Permanent drop-off depot for HHW Special HHW drop-off days Toxic Taxi service			
· Mobile HHW depots			

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities			
· In-vessel composting of source separated	· Potential nuisance effects:	· Existing facilities: Proper	· Potential odour and health
organics	- odour	management of the material must be	concerns and minor nuisance
<ul> <li>Centralized windrow composting of leaf</li> </ul>	<ul> <li>scavenging animals and birds</li> </ul>	maintained in reducing odour and	effects such as traffie, litter, birds
and yard waste	- visual	scavenging animal problems	vermin and noise associated with
· Community Composting	- illegal dumping	MOEE proposed regulations	centralized composting facilities.
	- traffic, truck queuing	(MOEE, 1993) do not appear to	May be reduced with public
	- noise	mitigate all of the documented	education and consultation and
	- child safety	effects.	proper management.
	<ul> <li>property devaluation</li> </ul>	· Composting sites should be located	· Potential for odour and vermin
	- stigma for neighbourhood	in areas of compatible land use. The	problems at community composting
		siting considerations for these types	facilities.
	· Potential Health concerns	of facilities should address: odour,	
	Odour effects have been significant	heavy truck traffic, truck queuing,	
	enough to have leaf and yard waste	nuisance and litter.	
	composting facilities closed (RIS,	· State-of-the-art odour control	
	1993; J. Scott, 1993)	features should be design	
	· Potential for odour and vermin	requirements. Local residents should	
•	problems at community composting	be on the management/monitoring	
	facilities.	committees (Lesnicki, 1993).	
		As management of the facility	
		should comply with all operational	
		requirements, the requirements	
		should be reviewed frequently due	
		to the limited experience in	
		composting on a large scale.	

Component Category/Components	Potential Effects	Mitigation/Enbancement	Component Net Effects
Composting Facilities (continued)  In-vessel composting of source separated organics Centralized windrow composting of leaf and yard waste Community Composting		Research does not indicate an association between occupational health problems and composting because dose-response issues are not resolved. (Maritato et al., 1992). However, health effects could be monitored for workers and the neighbouring residents over an initial period at the required facility (Taylor, 1993).  Some effects likely to be mitigated over time due to greater familiarity with effects and mitigation (e.g. improvements to siting design, operations and technology).	
		composters	
Reuse Centres and Activities			
Municipal reuse centre Private reuse centre Non-profit reuse centre Charitable reuse centres	<ul> <li>Traffic concerns</li> <li>Visual effect of large bins in plazas</li> <li>Centres may not be desirable in all areas due to stigma</li> </ul>	Locate Reuse Centres in areas of compatible land use	No effect
<ul> <li>Food reuse organization</li> <li>Special goods exchange days</li> </ul>			

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Public MRFs			
· Processing centre for dry recyclables	Potential nuisance effects:     Inter     visual     traffic, truck queung     noise     childrens safety     property devaluation     illegal dumping at centre.	Mitigation will need to encompass proper siting and management. Siting: MRF's should be sited in areas of compatible land use. The siting considerations for these types of facilities will need to address: heavy truck traffic, noise, visibility, truck queuing, litter, and the possibility of excess storage (Lesneki, 1993).  Management: The Facility will need to be managed in such a way as to control dust, litter, odour, rodents and other pesis, and excess materials. Many of these effects could be controlled by proper site design and planning (berms, fences, etc.).  Mitigation measures will need to be developed on a system-wide basis for the management of excess materials as a result of over-supply of some material markets. While these materials may not be kept at the MRE's, storage will be con a monitorine/management committee.	Potential minor nuisance effects such as traffic, litter and noise. Effects dependent on operation, type of material, sensitivity and number of people near facility.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Public MRFs			
· Processing centre for dry recyclables		Some effects likely to be mitigated over time due to greater familiarity with effects and mitigation (e.g.	
	*	improvements to siting design, operations and technology).	
		Public consultation program established with local residents to	
		ensure all concerns and effects are addressed.	
		_	

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations			
Drop-off depot for dry recyclables  Depois located at transfer stations/landfill	Potential nuisance effects:  Ititer  visual  noise  child safety  property devaluation  Illegal dumping at centre	Mitigation will need to encompass proper siting and management. Siting: Depots and transfer stations should be sited in areas of compatible land use. The siting considerations for these types of facilities will need to address heavy truck traffic, noise, visibility, truck queuing, litter, and the possibility of excess storage (Lismeki, 1993). Management: The Facility will need to be managed in such a way as to control dust, litter, oxfour, redents and other pests, and excess materials. Many of these effects could be controlled by proper site design and planning (berms, fences, etc.).  Mitigation measures will need to be developed on a system-wide basis for the management of excess materials as a result of over-supply of some materials may not be kept at the MR's, storage will be required elsewhere.  Some effects likely to be mitigated over time due to greater familiarity with effects and mitigation (e.g., improvements to sting design,	some facilities.
		operations and technology).	

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations (continued)			
Drop-off depot for dry recyclable     Depots located at transfer stations/landfill		· Local residents should be on a monitoring/management committee	
Residential Promotion and Education			
3Rs promotion and education program Consumer education program	· No effect	· Mitigation not required	· No effect

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## GENERIC COMPONENTS NET EFFECTS TABLE H1.2

MUNICIPALITY: GTA

CRITERION

: Potential Local Community Impacts

System: Residential Existing Indicator: Potential Effects on Special and Sensitive Groups

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal			
Curbside Collection of residential garbage from single family dwellings Collection of residential garbage from multi-family units	. No effect	Mitigation not required	· No effect
Residential Recycling and Collection			
Curbside collection of Blue Box Expanding curbside collection Collection of bins of recyclables from multi-family units Drop-off depot for multi-family residents not serviced by recycling Drop-off depot for rural households	Elderly and physically challenged may have difficulty in setting out recyclable and compostable material for pick-up and using drop-off facilities.	Provide maximum convenience possible	Elderly and physically challenged may have difficulty in setting out recyclable and compostable material for pick-up and using drop-off facilities.
Residential Leaf and Yard Waste Collection			
Seasonal separate collection of leaf and yard waste     Drop-off depot for leaf and yard waste	. No effect	Mitigation not required	· No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting  Backyard composter distribution programs  Large 3-bin composting units distributed to apartment and co-operative housing complexes	Very minor nuisance effects associated with odour and physical strain on elderly.	· Mitgation not required	Very minor nuisance effects associated with odour and physical strain on elderly.
Other Residential Waste Diversion (HIIW, Toxic Taxi, Pilot Wet/Dry, White Goods Collection, White Goods Drop-Off, etc.) Special curbside collections of Christmas trees Special and weekly curbside collections of white goods Drop-off depots for white goods Special curbside collection for bulky items Permanent drop-off depot for HIWW Special HIW drop-off days Toxie Taxi service Mobile HHW depots	<ul> <li>Possible occupational safety concerns with drivers and handlers of HHW.</li> </ul>	. Education program for drivers and handlers of HHW	Minor possible occupational safety concerns with drivers and handlers of HHW.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities  In-vessel composting of source separated organics  Centralized windrow composting of leaf and yard waste  Community Composting	Although the research (Curtis et al., 1991) indicates that properly managed compositing produces a safe product, there are:     Possible health effects on allergy sufferers, people with respiratory ailments, people with immunodeficiencies.     Possible employee health concerns (Taylor, 1993).	Since the destruction of pathogens in compost is directly proportional to the temperature increases achieved in the piles ('urris et al., 1991), appropriate operatuonal procedures should be instituted to maximize this destruction.  Prudence dictates that employees should practise proper hygiene and wear protective clothing. Health effects monitoring for employees and high-risk residents should be an operational condition.	Employees at composting facilities may be exposed to health and safety hazards. Should be minimized by education. Could be minimated by proper design and control.  Potential for health effects on allergy sufferers, people with immuno deficiencies, etc. Magnitude of effect may be minimized by proper string considerations of new facilities and proper management.
Reuse Centres and Activities  Municipal reuse centre Private reuse centre Non-profit reuse centre Charitable reuse centres Food reuse organization Special goods exchange days	Food contamination issue and liability concerns of donors (Wrigley, 1993).     Positive effect for low-income and disabled groups     Possible transfer of pests in reuse centers, exchange days, etc.	Train food distribution groups in potential contamination/spoilage. Province to consider "Grood Samaritan" Legislation to absolve donor of responsibility. Cleaning and furnigation of materials.	. No effect
Public MRFs  Processing centre for dry recyclables	· Possible employee health/safety concerns	· Educate/train employees on health and safety hazards and precautions	Possible employee health and safety concerns. Should be minimized by mitigation.

Component Category/Components Pot	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations			
Drop-off depot for dry recyclables     Depots located at transfer stations	· Possible employee health/safety concerns	· Educate/train employees on health · No effect and safety hazards and precautions	· No effect
Residential Promotion and Education			
3Rs promotion and education program     Consumer education program	· No effect	· Mitigation not required	· No effect

# TABLE H1.3 GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY: GTA
CRITERION: Potential Lo

: Potential Local Community Impacts

System: Residential Existing Indicator: Potential Effects on Community

Comment Cateory/Comments	Potential Effects	Witiostlon/Enhancement	Commonent Net Effects
Garbage Collection and Disposal		0	
Curbside collection of residential garbage from single family dwellings     Collection of residential garbage from multi-family units     Self haul of garbage	. No effect	· Mitigation not required	· No effect
Residential Recycling and Collection			
Curbside collection of Blue Box materials     Collection of bins of recyclables from multi-family units     Drop-off deport for multi-family residents not serviced by recycling     Drop-off depot for rural households	Potential for community pride from participation	· Mitgation not required	Potential for community pride from participation
Residential Leaf and Yard Waste Collection			
Curbside collection of leaf and yard     waste     Drop-off depot for leaf and yard waste	. No effect	· Miligation not required	. No effect
Residential Household Composting			
Backyard composter distribution programs     Large 3-bin composting units distributed to apartment and co-operative housing complexes	. No effect	· Mitigation not required	. No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Other Residential Waste Diversion (IIIIW, Toxic Taxi, Pilot Wet/Dry, White Goods Collection, White Goods Drop-Off, etc.)			
Special curbside collections of Christmas trees     Special and weekly curbside collections of white goods     Drop-off depois for white goods     Special curbside collection for bulky items     Permanent drop-off depoi for HHW     Special HHW drop-off days     Toxic Taxi service     Mobile HHW depois	Failure of programs tends to have a negative effect on community image. For example, couches, mattresses, etc. disposed in vacant lots.	Develop incentives for people to donate useful large items, repair/reuse items or properly dispose of them.     Assistance in organization of community garage sales, flea markets etc.     Enforcement for itlegal dumping	Minor negative stigma effect on community image from illegal dumping
Composting Facilities  In-vessel composting of source separated organics  Centralized windrow composting of leaf and yard waste  Community Composting	Possible stigma effect in some communities	State-of-the-art odour control     should be an operational condition	· Possible stigma effect in some communities
Reuse Centres and Activities  Municipal reuse centre  Non-profit reuse centre  Charitable reuse centres  Food reuse organization  Special goods exchange days	Possible stigma effect in some communities	<ul> <li>Location of the reuse centres in suitable land use area</li> </ul>	· No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Public MRFs			
Processing centre for dry recyclables	<ul> <li>Possible stigma effect in some communities</li> </ul>	Mitigation as "Potential Effects on Residents"	Possible stigma effect in some communities. Magnitude of effect dependent on site location and management of the facility
Residential Recycling Depots and Transfer Stations			
Drop-off depot for dry recyclables     Depots located at transfer stations/landfills	Possible stigma effect in some communities	Mugation as "Potential Effects on Residents"	Possible stigma effect in some communities. Magnitude of effect dependent on site location and management of the facility
Residential Promotion and Education			
3Rs promotion and education program Consumer education program	<ul> <li>Possible increase in community pride</li> </ul>	· Mitigation not required	<ul> <li>Possible increase in community pride</li> </ul>



# TABLE H1.4 GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY: GTA
CRITERION: Potential Local Community Impacts

System : Residential Existing Indicator: Potential Effects on Community Features and Businesses

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal			
Curbside collection of residential garbage from single family dwellings     Collection of residential garbage from multi-family units     Self haul of garbage	. No effect	Mitigation not required	. No effect
Residential Recycling and Collection			
Curbside collection of Blue Box materials     Expanding curbside collection     Collection of bins of recyclables from multi-family units     Drop-off depot for multi-family residents not serviced by recycling     Drop-off depot for rural households	. No effect	Mingation not required	No effect
Residential Leaf and Yard Waste Collection			
Curbside collection of leaf and yard waste Drop-off depot for leaf and yard waste	. No effect	· Mitigation not required	. No effect
Residential Household Composting			
Backyard composter distribution programs     Large 3-bin composting units distributed to apartment and co-operative housing complexes	· No effect	· Mitigation not required	. No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects .
Other Residential Waste Diversion (HHW, Toxic Taxi, Pilot Wet/Dry, White Goods Collection, White Goods Drop-Off, etc.)			·
· Special curbside collections of Christmas trees	. No effect	· Mitigation not required	· No effect
<ul> <li>Special and weekly curbside collections of white goods</li> </ul>			
Drop-off depots for white goods     Special curbside collection for bulky items			
Permanent drop-off depot for HHW     Special HHW drop-off days			
Toxic Taxi service			
Mobile HHW depots			

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Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities			
· In-vessel composting of source separated	· Potential nuisance effects:	· Existing facilities: Proper	Potential odour and health
organics	- odour	management of the material must be	concerns and minor nuisance
<ul> <li>Centralized windrow composting of leaf</li> </ul>	<ul> <li>scavenging animals and birds</li> </ul>	maintained in reducing odour and	effects such as traffic, litter, birds
and yard waste	- visual	scavenging animal problems.	vermin and noise associated with
· Community Composting	- illegal dumping	MOEE proposed regulations	centralized composting facilities.
	<ul> <li>traffic, truck queuing</li> </ul>	(MOEE, 1993) do not appear to	May be reduced with public
	- noise	mitigate all of the documented	education and consultation and
	- child safety	effects.	proper management.
	- property devaluation	<ul> <li>Composting sites should be located</li> </ul>	Potential for odour and vermin
	<ul> <li>stigma for neighbourhood</li> </ul>	in areas of compatible land use. The	problems at community
		siting considerations for these types	composting facility
	<ul> <li>Potential Health concerns</li> </ul>	of facilities should address: odour,	
	Odour effects have been significant	heavy truck traffic, truck queuing,	
	enough to have leaf and yard waste	nuisance and litter.	
	composting facilities closed (R1S,	<ul> <li>State-of-the-art odour control</li> </ul>	•
	1993; J. Scott, 1993)	features should be design	
	<ul> <li>Potential for odour and vermin</li> </ul>	requirements. Local residents should	
	problems at community composting	be on the management/monitoring	
	facility	committees (Lesnicki, 1993).	
		As management of the facility should	
		comply with all operational	
		requirements, the requirements	
		should be reviewed frequently due to	
	-	the limited experience in composting	
		on a large scale.	

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities (continued)  · in-vessel composting of source separated organics · Centralized windrow composting of leaf and yard waste · Community Composting	*	Research does not indicate an association between occupational health problems and composting because dose-response issues are not resolved. (Maritato et al., 1992). However, health effects could be monitored for workers and the neighbouring residents over an initial period at the required facility (Taylor, 1993).  Some effects likely to be mitigated over time due to greater familiarity with effects and mitigation (e.g. improvements to stiting design, operations and technology).  Proper supervision at community composting.	
Reuse Centres and Activities			
Municipal reuse centre     Private reuse centre     Non-profit reuse centre     Charitable reuse centres     Food reuse organization     Special goods exchange days	Minor nuisance related effects on neighbouring features and businesses     Visual blight/image effect	· Mitigation not required	. No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Public MRFs			
· Processing centre for dry recyclables	· Potential nuisance effects:	· Mitigation will need to encompass	· Potential minor nuisance effects
	- litter	proper siting and management.	such as traffie, litter and noise.
	- vısual	· Siting: MRI's should be sited in	Effects dependent on operation,
	- traffic, truck queuing	areas of compatible land use. The	type of material, sensitivity and
	- noise	siting considerations for these types	number of people near facility.
	- children safety	of facilities will need to address:	
	- property devaluation	heavy truck traffic, noise, visibility,	
	- illegal dumping at centre	truck queuing, litter, and the	
		possibility of excess storage (Lesnicki,	
		1993).	
		Management: The Facility will need	
		to be managed in such a way as to	
		control dust, litter, odour, rodents	
		and other pests, and excess materials.	
		Many of these effects could be	
		controlled by proper site design and	
		planning (berms, fences, etc.)	
		Mitigation measures will need to be	
		developed on a system-wide basis for	
		the management of excess materials	
		as a result of over-supply of some	
		material markets. While these	
		materials may not be kept at the	
		MRFs, storage will be required	
		elsewhere.	
		Local residents should be on a	
		monitoring/management committees.	

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Public MRFs (continued)	*		
· Processing centre for dry recyclables		Some effects likely to be mitigated over time due to greater familiarity with effects and mitigation (e.g. improvements to siting design, operations and technology). Public consultation program established with local residents to ensure all concerns and effects are addressed.	

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Component Category/Components	Fotential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations			
Drop-off depot for dry recyclable     Depots located at transfer stations/landfill	Potential nuisance effects:     - litter     - visual     - traffic, truck queuing     - noise     - child safety     - property devaluation     - illegal dumping at centre	Mitigation will need to encompass proper siting and management.  Siting: Depots and stations should be sited in areas of compatible land use. The facilities are expected to be significantly smaller in scale than Public MRFs. The siting considerations for these types of facilities will need to address: truck traffic, noise, truck queuing, litter, and the possibility of excess storage (Lesnicki, 1993).  Management: The Facility will need to be managed in such a way as to control dust, litter, odour, rodents and other pests, and excess materials. Many of these effects could be controlled by proper site design and planning (berms, fences, etc.)  Mitigation measures will need to be developed on a system-wide basis for the management of excess materials as a result of over-supply of some material markets. While these	Potential minor nuisance effects at some facilities.
		depots, storage will be required clsewhere.	

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations (continued)			
Drop-off depot for dry recyclable     Depots located at transfer stations/landfill		Some effects likely to be mitigated over time due to greater familiarity with effects and mitigation (e.g. improvements to siting design, operations and technology).  Local residents should be on a monitoring/management committee.	
Residential Promotion and Education			
3Rs promotion and education program Consumer education program	· No effect	Mitigation not required	No effect

# TABLE H1.5 GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY: GTA
CRITERION: Potential For Broad Social Impact

System : Residential Existing Indicator: Potential for Lifestyle Changes

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal	No offices		
Cursone conection of residential garbage from single family dwellings. Collection of residential garbage from multi-family units. Self haul of garbage	No effect	Mingation not required	. No cilect
Residential Recycling and Collection			
· Curbside collection of Blue Box materials	Positive social and lifestyle effect, people willing to do and learn more,	Ensure the provision of information and educational services for new	Positive social and lifestyle effect, people willing to do and learn
<ul> <li>Expanding curbside collection</li> <li>Collection of bins of recyclables from</li> </ul>	source of personal and community pride.	residents (Environics, 1990). This must be a continual effort to address	more, source of personal and community pride.
multi-family units  Drop-off depot for multi-family	<ul> <li>Bins may attract nuisances if not picked up often.</li> </ul>	turnover and increase in future densities.	
residents not serviced by recycling  Drop-off depot for rural households		· Ensure regular pick-up.	
Residential Leaf and Yard Waste Collection			
· Curbside collection of leaf and yard	· Positive social and lifestyle effect,	· Mitigation not required	Positive social and lifestyle effect,
waste	people willing to do and learn more,		people willing to do and learn
· Drop-off depot for leaf and yard waste	source of personal and community		more, source of personal and
	pride - Encourages positive local action		community pride

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting			
· Backyard composter distribution	· Positive social and lifestyle effect,	· Address complaints (e.g., ill-fitting	Positive social and lifestyle effect,
programs	people willing to do and learn more,	lids, insufficient volume) of users.	people willing to do and learn
<ul> <li>Large 3-bin composting units</li> </ul>	source of personal and community	<ul> <li>Provide kitchen containers, home</li> </ul>	more, source of personal and
distributed to apartment and co-	pride	delivery of composters, on-going	community pride
operative housing complexes	· Encourages positive local action	subsidies (Environics, 1990;	· Potential for minor lifestyle
	Inconvenience and annoyance for a	Maclaren, 1990; Metropolitan Works	inconveniences associated with
	minority of people: (e.g, ill-fitting lids,	Committee, 1992).	backyard composters
	insufficient volumes, lack of space,	<ul> <li>On-going education for proper use.</li> </ul>	
	odours, pests, scavenging animals)		
	Program may have substantial		
	potential to increase waste diversion		
	(MacLaren, 1990; Environics, 1990)		

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Other Residential Waste Diversion (HHW, Toxic Taxi, Pilot Wet/Dry, White Goods Collection, White Goods Drop-Off, etc.)			
Special curbside collections of Christmas trees Special and weekly curbside collections of white goods Drop-off depois for white goods Poperal curbside collection for bulky items Permanent drop-off depoi for IIIIW Special HIIW drop-off days Toxic Taxi service Mobile IIIIW depois	White goxds disposal appears to be increasingly inconvenient and difficult; this has resulted in illegal dumping.     Consumers may become much more concerned about size and durability of appliances and furniture.     Residents may become more aware of IIIIW and white goods management and change purchasing attitudes.	Improved service for white goods and large items. Develop special waste days and special depots for multi-family building collection.  Make collection drop-off point convenient for all households and/or continue toxic taxi. Develop promononal/ducational materials to emphasize atternatives to HHW for pest control, lawn & garden, cleaning agents, and paint and solvents Encourage the use of 3Rs for HHW and the separation of HHW from garbage (Manitoba Hazardous Waste Management Corporation, 1992)	Residents may become more aware of HIIW and white goods management and change purchasing attitudes.
Composting Facilities  Centralized windrow composting of leaf and yard waste  In-vessel composting of source separated organics  Community Composting	. No effect	· Mitigation not required	· No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Reuse Centres and Activities  Municipal reuse centre  Private reuse centre  Charitable reuse centre  Charitable reuse centres  Food reuse organization  Special goods exchange days	In some instances, has social welfare benefits May contribute to acceptance of using repaired/second hand items rather than buying new products Increased appeal and household economic benefits with future demographic changes. Can contribute to neighbourhood cohesiveness: and provide communal garage sales, flea markets, bazaars, etc.	<ul> <li>Provide incentives for establishing reuse centres and for holding "garage" sales</li> </ul>	Positive effect may contribute to acceptance of using repaired/second hand items rather than buying new products. In some instances, has social welfare benefits in Increased appeal and household economic benefits with future demographic changes. Can contribute to neighbourhood cohesiveness through communal garage sales, flea markets, bazaars, etc.
Public MRFs Processing centre for dry recyclables	. No effect	· Mitigation not required	. No effect
Residential Recycling Depots and Transfer Stations  Drop-off depot for dry recyclables  Depots located at transfer stations/landfills	. No effect	· Mitigation not required	. No effect

	Determined Definition	Mitigation/Enhancement	Commonent Net Effects
Component Category/Components	rotential Ellects	Mitigation/Emulancement	Component tyer Eulerts
Residential Promotion and Education			
Consumer education program     Consumer education program	Potentially encourages positive changes to conserver and waste diversion attitudes; emphasizing reduction and reuse, as well as recycling, could lead to lifestyle change. Could increase demand for packaging reduction (Environics, 1990)	Expand and refine promotion and education programs to target non-participating groups and to allow for changes in demographic make-up of GTA (Favronics, 1990; Morgan-Fraser, 1993).  Promotional/Fiducational programs should be based on successful programs identified in the 3Rs interactive (e.g., Folz & Hazlett, 1990). For example, pamphlets and brochures (in utility bills, etc.) and community information meetings. The role of the schools could be critical, particularly for new Canadians whose children are receiving the only English instruction in the family. Many School Boards have environmental education committees and the schools are increasingly being led by Principals & V.Pt's cager to spread an	Potentially positive effect; encourages positive changes to conserver and waste diversion attitudes; emphasizing reduction and reuse, as well as recycling, could lead to lifestyle change
		environmental message.	



# TABLE H1.6 GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY: GTA System: Existing CRITERION: Potential For Broad Social Impact Indicator: Potential Effects on Employment

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal			
Curbside collection of residential garbage from single family dwellings     Collection of residential garbage from multi-family units     Self haul of garbage	. No effect	· Mitigation not required	. No effect
Residential Recycling and Collection			
· Curbside collection of Blue Box	Minor direct employment gains,	· A transition to conserver attitudes	· Minor direct employment gains,
materials	primarily in low skill jobs, are likely	has major implications for the	primarily in low skill jobs, are likely
· Expanding curbside collection	in recycling industries and in	economy and employees. While many	in recycling industries and in
<ul> <li>Collection of bins of recyclables from</li> </ul>	recycling collection. Indirect effects	· persons in society will adapt easily to	recycling collection. Indirect effects
multi-family units	could include both short and long-	changes, others will not. Mitigation	could include both short and long-
· Drop-off depot for multi-family	term changes in secondary and	is likely to occur as the economy	term changes in secondary and
residents not serviced by recycling	tertiary employment. Magnitude,	readjusts to 3Rs management. There	tertiary employment. Magnitude,
<ul> <li>Drop-off depot for rural households</li> </ul>	timing and direction is uncertain.	should be a partnership between	timing and direction is uncertain.
	<ul> <li>Net long term employment effects</li> </ul>	government, business and labour to	<ul> <li>Net long term employment effects</li> </ul>
	uncertain. Will be partly dependent	facilitate this change in attitude.	uncertain. Will be partly
	on the ability to capture "Green" jobs	Education and re-training will be key	dependent on the ability to capture
	and not lose jobs in other sectors as	components to help the working	"Green" jobs and not lose jobs in
	a result of 3Rs.	population adapt to new and	other sectors as a result of 3Rs.
		evolving sectors in the "green"	
		economy.	

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Leaf and Yard Waste Collection  Curbside collection of leaf and yard waste  Drop-off depot for leaf and yard waste	. No effect	· Mitigation not required	· No effect
Residential Household Composting  Backyard composter distribution programs  Large 3-bin composting units distributed to apartment and cooperative housing complexes  Community composting	Direct employment gains, primarily in low skill jobs, are likely in the manufacturing of composters, and in the management of the program. Indirect effects could include both short and long term changes in secondary and tertiary employment. Magnitude, timing and direction of effects is uncertain.	A transition to conserver attitudes has major implications for the economy and employees. While many persons in society will adapt easily to these changes, many will not. Mitigation is likely to occur as the economy readjusts to 3Rs management. There should be a partnership between government, business and labour to facilitate this change in attitude. Education and re-training will be key components to help the working population adapt to new and evolving sectors in the "green" economy.	Direct employment gains, primarily in low skill jobs, are likely in the manufacturing of composters, and in the management of the program. Indirect effects could include both short and long term changes in secondary and tertiary employment. Magnitude, timing and direction of effects is uncertain.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Other Residential Waste Diversion (IHW, Toxic Taxi, Pilot Wet/Dry, White Goods Collection, White Goods Drop- Off, etc.)  Special curbside collections of Christmas trees Special and weekly curbside collections of white goods Drop-off depots for white goods Special curbside collection for bulky items Permanent drop-off depot for IIIIW Special IIIW drop-off days Toxic Taxi service Mobile IIIIW depots	Minor direct employment effect in these programs. Indirect effects could include both short and long term changes in secondary and tertiary employment. Magnitude, timing and direction of effects is uncertain	A transition to conserver attitudes has major implications for the economy and employees. While many persons in society will adapt easily to these changes, many will not. Mitigation is likely to occur as the economy readjusts to 3Rs management. There should be a partnership between government, business and labour to facilitate this change in attitude. Education and re-training will be key components to help the working population adapt to new and evolving sectors in the "green" economy.	Minor direct employment effect in these programs. Indirect effects could include both short and long term changes in secondary and tertiary employment. Magnitude, timing and direction of effects is uncertain.
Composting Facilities			
Centralized windrow composing of leaf and yard waste     In-vessel composing of source separated organics     Community Composting	Direct employment, primarily in low skill jobs, at the composting facilities and in the management of the program. Indirect effects could include both short and long term changes in secondary and tertiary employment. Magnitude, timing and direction of effects is uncertain.	. Mitigation not required	Direct employment, primarily in low skill jobs, at the composing facilities and in the management of the program. Indirect effects could include both short and long term changes in secondary and tertuary employment. Magnitude, timing and direction of effects is uncertain.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Reuse Centres and Activities			
Municipal reuse centre     Private reuse centre     Non-profit reuse centre	Direct employment gains, primarily in low skill jobs, are likely at these centres. Indirect effects could	· Mitigation not required	Direct employment gains, primarily in low skill jobs, are likely at these centres. Indirect effects could
Charitable reuse centres     Food reuse organization     Special goods exchange days	include both short and long term changes in secondary and tertiary employment. Magnitude, timing and direction of effects is uncertain.		include both short and long term changes in secondary and tertiary employment. Magnitude, tuning and direction of effects is uncertain.
Public MRFs			
Processing centre for dry recyclables	Direct employment gains, primarily in low skill jobs, are likely in at MRI's and in recycling industries. Indirect effects could include both short and long term changes in secondary and tertiary employment. Magnitude, timing and direction of effects is uncertain.	Mitigation not required	Direct employment gains, primarily in low skill jobs, are likely in at MRFs and in recycling industries. Indirect effects could include both short and long term changes in secondary and retriary employment. Magnitude, timing and direction of effects is uncertain.
Residential Recycling Depots and Transfer Stations			
Drop-off depot for dry recyclable     Depots located at transfer     stations/landfills	Direct employment gains, primarily in low skill jobs, are likely in haulage and in the management of the program. Indirect effects could include both short and long term changes in secondary and tertiary employment. Magnitude, timing and direction of effects is uncertain.	· Mitigation not required	Direct employment gains, primarily in low skill jobs, are likely in haulage and in the management of the program. Indirect effects could include both short and long eerm changes in secondary and tertiary employment. Magnitude, timing and direction of effects is uncertain.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Promotion and Education			
3Rs promotion and education program Consumer education program	Direct employment gains are likely in printing, production and distribution. Indirect effects could include both short and long term changes in secondary and tertiary employment. Magnitude, timing and direction of effects is uncertain.	A transition to conserver attitudes has major implications for the economy and employees. While many persons in society will adapt easily to these changes, many will not. Mitigation is likely to occur as the economy readjusts to 3Rs management. There should be a partnership between government, business and labour to facilitate this change in attitude. Education and re-training will be key components to help the working population adapt to new and evolving sectors in the "green" economy.	Direct employment gains are likely in printing, production and distribution. Indirect effects could include both short and long term changes in secondary and tertiary employment. Magnitude, timing and direction of effects is uncertain.



# TABLE H1.7 GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY: GTA CRITERION

: GTA System : Residential Existing : Potential For Broad Social Impact Indicator: Potential Effects on Economic Development

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal			
Curbside collection of residential garbage from single family dwellings Collection of residential garbage from multi-family units Self haul of garbage	. No effect	Mitigation not required	· No effect
Residential Recycling and Collection			
Curbside collection of Blue Box materials     Expanding curbside collection     Collection of bins of recyclables from multi-family units     Drop-off depot for multi-family residents not served by recycling     Drop-off depot for rural households	Minor direct economic benefits are likely in recycling industries, and in recycling collection. Indirect economic effects could include both short and long-term changes in secondary and tertiary sectors. Over the long-term, this initiative could lead to the development of marketable "green" systems, technologies, and products in the CTA (Mereer, 1993).	The economic base is shifting from manufacturing to a more service orientation. Along with this trend is the movement towards a "green" economy. This transition is being made by various companies and sectors. However, the long-term competitiveness of the region may be dependent on the others making the transition as well. Government, business, and environmental interests should work in partnership to facilitate this transition (eg. Roundtables on the Economy and Environment), and grasp the opportunities for marketing "green" systems and technologies	Minor direct economic benefits are likely in recycling industries, and in recycling collection. Indirect economic effects could include both short and long-term changes in secondary and tertiary sectors. Over the long-term, this initiative could lead to the development of marketable "green" systems, technologies, and products in the GTA (Mercer, 1993).

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Leaf and Yard Waste Collection Curbside collection of leaf and yard Waste	No effect	Mitigation not required	. No effect
Residential Household Composting			
Backyard composter distribution programs Large 3-bin composting units distributed to apartment and co-operative housing complexes	Minor direct economic benefits are likely in the manufacturing of composters, and in the management of the program. Indirect economic effects could include both short and long-term changes in secondary and tertiary sectors and cost savings from a reduction in landfill fees, due to reduced volumes. Magnitude, itiming and direction of effects is uncertain. Over the long-term, this initiative could lead to the development of marketable "green" products in the GTA.	. Mitigation not required	Minor direct economic benefits are likely in the manufacturing of composters, and in the management of the program. Indirect economic effects could include both short and long-term include both short and long-term include both short and long-term sectors and cost savings from a reduction in landfill fees, due to reduced volumes. Magnitude, timing and direction of effects is uncertain.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Other Residential Waste Diversion (IIIIW, Toxic Taxi, Pilot Wet/Dry, White Goods Collection, White Goods Drop-Off, etc.)			
Special curbside collections of Christmas trees Special and weekly curbside collections of white goods Drop-off depoits for white goods Special curbside collection for bulky items Permanent drop-off depoit for IIHW Special HHW drop-off days Toxic Taxi service Mobile HHW depoits	ikely in recycling industries, and in collection. Indirect economic effects could include both short and long-term changes in secondary and tertiary sectors and cost savings from a reduction in landfill fees, due to reduced volumes.  Magnitude, timing and direction of effects is uncertain. Over the long-term, this initiative could lead to the development of marketable "green" systems, technologies, and products in the GTA (Lesnicki and Mercer, 1993).	The economic base is shifting from manufacturing to a more service orientation. Along with this trend is the movement towards a "green" economy. This transition is being made by various companies and sectors. However, the long-term competitiveness of the region may be dependent on the others making the transition as well. Government, business, and environmental interests should work in partnership to facilitate this transition (e.g. Roundtables on the Economy and Environment), and grasp the opportunities for marketing "green" systems and technologies	Minor direct economic benefits are likely in recycling industries, and in collection. Indirect economic effects could include both short and long-term changes in secondary and tertiary sectors. Magnitude, timing and direction of effects is uncertain.
		nationally and internationally.	

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities			
Centralized windrow composting of leaf and yard waste In-vessel composting of source separated organics Community composting	Minor direct economic benefits are likely at composting, and in the management of the program. Indirect economic effects could include both short and long-term changes in secondary and tertiary sectors and eost savings from a reduction in landfill fees, due to reduced volumes. Magnitude, tuming and direction of effects is uncertain. Over the long-term, this initiative could lead to the development of marketable "green" products in the GTA.	· Mitigation not required	Minor direct economic benefits are likely at composting, and in the management of the program. Indirect economic effects could include both short and long-term changes in secondary and tertiary sectors and cost savings from a reduction in landfill fees, due to reduced volumes. Magnitude, timing and direction of effects is uncertain. Over the long-term, this initiative could lead to the development of marketable "green" products in the GTA.
Rense Centres and Activities  Municipal reuse centre  Private reuse centre  Chariable reuse centre  Chariable reuse centres  Food reuse organization  Special goods exchange days	Minor direct economic benefits are likely at these centres. Indirect economic effects could include both short and long-term changes in secondary and tertiary sectors. Magnitude, timing and direction of effects is uncertain. For example, decreased demand for new products. Over the long-term, this initiative could lead to a viable purchasing option for certain SES groups in the GTA.	· Mitigation not required	Minor direct economic benefits are likely at these centres. Indirect economic effects could include both short and effects could shape and tertiary sectors. Magnitude, timing and direction of effects is uncertain.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Public MRFs			
. Processing centre for dry recyclables	Provides the infrastructural support for recycling materials by the private and public sector.	The economic base is shifting from manufacturing to a more service orientation. Along with this trend is the movement towards a "green" economy. This transition is being made by various companies and sectors. However, the long-term competitiveness of the region may be dependent on the others making the transition as well. Government, business, and environmental interests should work in partnership to facilitate this transition (eg. Roundfables on the Economy and Environment), and grasp the opportunities for marketing "green" systems and technologies	Indirect effect on economic development by providing the infrastructure required for recycling by the private and public sectors.
Residential Recycling Depots and Transfer Stations			
Drop-off depot for dry recyclable     Depots located at transfer stations/landfills	Provides the infrastructural support for recycling materials by the private and public sector.	. Mitigation not required	Provides a minor short term economic benefit in the construction sector. Indirect effect on economic development by providing the infrastructure required for recycling by the private and public sectors.

Component Category/Components	Potential Effects	Mitigation/Enhancement .	Component Net Effects
Residential Promotion and Education			
Sks promotion and education program     Consumer education program	Minor direct economic benefits in printing, production and distribution. Indirect economic effects could include both short and long-term changes in secondary and tertiary sectors. Magnitude, timing and direction of effects is uncertain.	· Mitigation not required	Minor direct economic benefits in printing, production and distribution. Indirect economic effects could include both short and long-term changes in secondary and tertiary sectors. Magnitude, timing and direction of effects is uncertain.

#### GENERIC COMPONENTS NET EFFECTS TABLE H1.8

MUNICIPALITY: GTA

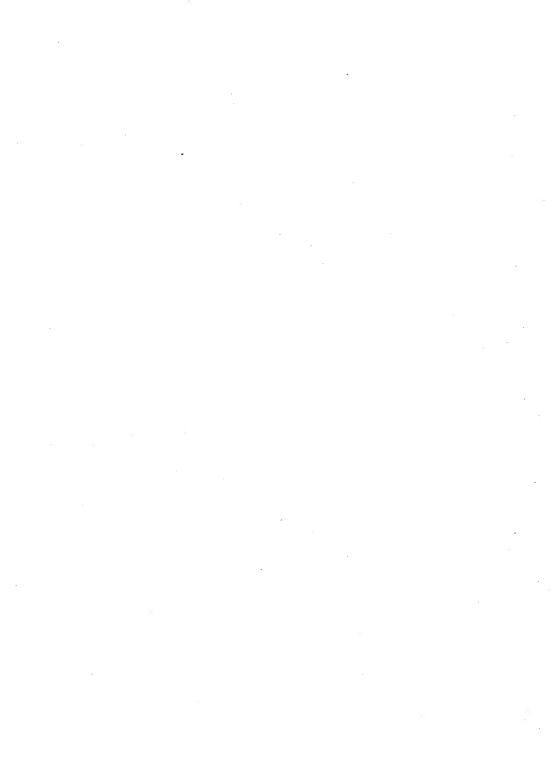
CRITERION

: GTA System : Residential Existing : Potential Por Broad Social Impact Indicator: Potential Operational Effects on Institutions, Commercial Enterprises and Industries

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal			
Curbside Collection of residential garbage from single family dwellings     Collection of residential garbage from multi-family units     Self haul of garbage	. No effect	Mitigation not required	. No effect
Residential Recycling and Collection			
Curbside collection of Blue Box materials     Expanding curbside collection     Collection of bins of recyclables from multi-family units     Drop-off depot for multi-family residents not serviced by recycling     Drop-off depot for rural households	<ul> <li>Minor positive effect through support of recycling</li> </ul>	Mitigation not required	· No effect
Residential Leaf and Yard Waste Collection			
Curbside collection of leaf and yard waste  Drop-off depot for leaf and yard waste	. No effect	Mitigation not required	· No effect
Residential Household Composting			
Backyard composter distribution programs Large 3-bin composting units distributed to apartment and co-operative housing complexes	. No effect	· Mitigation not required	· No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Other Residential Waste Diversion (HIIW, Toxic Taxi, Pilot Wet/Dry, White Goods Collection, White Goods Drop-Off, etc.)		-	
Special curbside collections of Christmas trees Special and weekly curbside collections of white goods Drop-off depots for white goods Special curbside collection for bulky items Permanent drop-off depot for HHW Special HHW drop-off days Toxic Taxl service Mobile HHW depots	The efficiency (or ease) of white goods disposal may have an effect on the sale of white goods (customers may want vendors to take back their old products).  Because of the increasing inconvenience to consumers in disposing of old appliances/furniture, etc., they may start looking for, and there may be a growing market for, products which are smaller and more durable.	Retail stores could develop buyback programs for large and bulky items. The consumer would then not be required to disperse items.	In the long term institutions and commercial enterprises may develop programs to "buy back" used white goods.
Composting Facilities  Centralized windrow composting of leaf	No effect	Mitigation not required	· No effect
and yard waste  In-vessel composting of source separate organics  Community Composting		*	·
Reuse Centres and Activities			
Municipal reuse centre     Private reuse centre     Non-profit reuse centre     Charitalle reuse centres	· No effect	· Mitigation not required	. No effect
· Food reuse organization · Special goods exchange days			

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Public MRFs			
Processing centre for dry recyclables	. No effect	Mitigation not required	. No effect
Residential Recycling Depots and Transfer Stations			
Drop-off depot for dry recyclable     Depots located at transfer stations/landfills	· No effect	· Mitigation not required	. No effect
Residential Promotion and Education			
3Rs promotion and education program     Consumer education program	· No effect	Mitigation not required	. No effect



#### DCB.SEE

# TABLE H1.9 GENERIC COMPONENTS NET EFFECTS.

MUNICIPALITY: GTA

CRITERION : Distribution of Social Costs and Benefits

System : Residential Existing Indicator: Distribution of Socio-Economic Effects on Industry and Population Groups.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal			
Curbside collection of residential garbage from single family dwellings Collection of residential garbage from multifamily units Self haul of garbage	. No effect	· Mugation not required	. No effect
Residential Recycling and Collection			
Curbside collection of Blue Box materials Expanding curbside collection Collection of bins of recyclables from multi-	. No effect	Mitigation not required	. No effect
family units  Drop-off depot for multi-family residents not serviced by recycling  Drop-off depot for rural households			
Residential Leaf and Yard Waste Collection			
Curbside collection of leaf and yard waste Drop-off depot for leaf and yard waste	· No effect	· Mitigation not required	. No effect
Residential Household Composting			
Backyard composter distribution programs     Large 3-bin composting units distributed to apartment and co-operative housing	· No effect	· Mitigation not required	. No effect
complexes			

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Other Residential Waste Diversion (IIIIW, Toxic Taxi, Pilot Wet/Dry, White Goods Collection, White Goods Drop-Off, etc.)  Special curbside collections of Christmas trees Special and weekly curbside collections of white goods Drop-off depots for white goods Special curbside collection for bulky items Permanent drop-off depot for HHW Special HHW drop-off days Toxic Taxi service Mobile IHHW depots	Residents of some municipalities are provided with IIIIW, white and bulky goods collection, while others are not.	Mitigation not required	Minor effect in different level of service for white goods collection in some municipalities
Composting Facilities  Centralized windrow composting of leaf and yard waste In-vessel composting of source separated organies Community Composting	Local residents and businesses may receive nuisance effects related to composting for all region residents	Site the composting facility in a non-residential area and away from sensitive industry and committed uses. Develop appropriate mitigation/compensation for site related impacts Address equity issue aspect of the siting process.	Minor negative distribution effect on local community.
Reuse Centres and Activities  Municipal reuse centre Private reuse centre Non-profit reuse centre Charitable reuse centres Food reuse organization Specjal goods exchange days	Positive effect for lower income groups as more low cost items made available and adds potential market for their goods	Mitigation not required	Positive effect for lower income groups as more low cost items made available and adds potential market for their goods

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Public MRFs			
Processing centre for dry recyclables	<ul> <li>Potential negative distribution effects on some groups living near facility</li> </ul>	· Mutigation as "Potential Effects on Residents"	<ul> <li>Potential negative distribution effects on some groups living near facility.</li> </ul>
Residential Recycling Depots and Transfer Stations			
Drop-off depot for dry recyclable  Depots located at transfer stations/landfills	Potential negative distribution effects on some groups living near facility.	Mitigation as "Potential Effects on Residents"	Potential negative distribution effects on some groups living near facility.
Residential Promotion and Education			
3Rs promotion and education program Consumer education program	No effect	Mitigation not required	- No effect



# TABLE H1.10 GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY: GTA

CRITERION

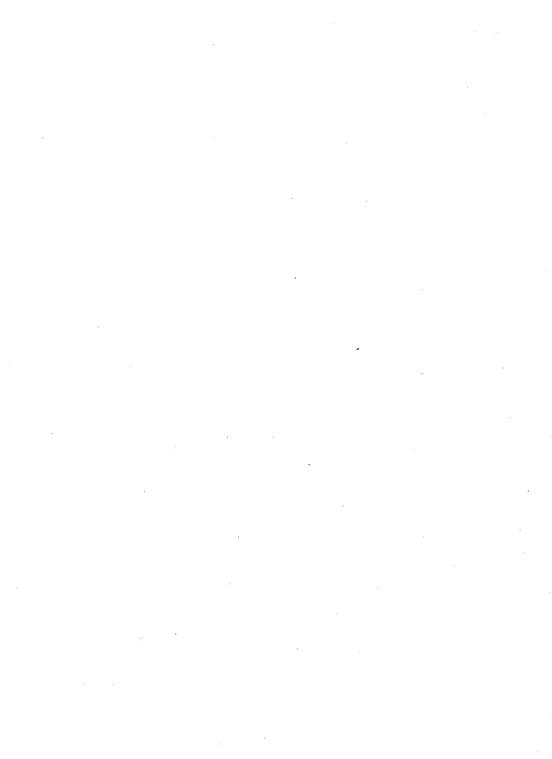
: Distribution of Social Costs and Benefits Indicato

System : Existing Indicator: Distribution of Lifestyle Effects

Component Category/ Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal			
Curbside collection of residential garbage from single family dwellings Collection of residential garbage from multifamily units Self haul of garbage	· No effeet	· Mitigation not required	. No effect
Residential Recycling and Collection			
Curbside collection of Blue Box materials Expanding curbside collection Collection of bins of recyclables from multifamily units Drop-off depot for multi-family residents not serviced by recycling Drop-off depot for rural households	Popular and environmentally beneficial, lifestyle affected throughout the region (Hay, ND; Environies, 1990). Minor difference in lifestyle effects in multi-family and low density development.	Mitigation not required	Minor lifestyle distributional effect between multi-family and low density residents
Residential Leaf and Yard Waste Collection			
Curbside collection of Icaf and yard waste Drop-off depot for leaf and yard waste	· No effect	· Mitigation not required	· No effect
Residential Household Composting			
Backyard composter distribution programs Large 3-bin composting units distributed to apartment and co-operative housing complexes	Popular and environmentally beneficial (Environics, 1990) Supports litestyle change for residents with back yards but does not support lifestyle change for others (Environics, 1990).	· Mitigation not required	Minor lifestyle distributional effect between multi-family and low density residents.

Component Category/ Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Other Residential Waste Diversion (IIIIW, Toxic Taxi, Pilot WetDry, White Goods Collection, White Goods Drop-Off, etc.)  Special curbside collections of Christmas trees Special and weekly curbside collections of white goods Drop-off depots for white goods Special curbside collection for bulky items Special curbside collection for bulky items - Special HHW drop-off days - Toxic Taxi service - Mobile IIIW depots	. No effect	· Mitigation not required	. No effect
Composting Facilities  · Centralized windrow composting of leaf and yard waste · In-vessel composting of source separated organics · Community Composting	. No effect	· Mitigation not required	· No effect
Reuse Centres and Activities  Municipal reuse centre  Private reuse centre  Charitable reuse centre  Charitable reuse centre  Food reuse organization  Special goods exchange days	No effect	· Mitigation not required	· No effect
Public MRFs  Processing centre for dry recyclables	. No effect	· Mitigation not required	. No effect

Component Category/ Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations			
Drop-off depot for dry recyclable Depots located at transfer stations/landfills	· No effect	· Mitigation not required	· No effect
Residential Promotion and Education			
3Rs promotion and education program Consumer education program	No effect	· Mitigation not required	. No effect



#### GENERIC COMPONENTS NET EFFECTS TABLE H1.11

MUNICIPALITY: GTA CRITERION : Distrib

System : Residential Existing Indicator: Potential Future Generation Effects of System : Distribution of Social Costs and Benefits

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal  Curbside collection of residential garbage from single family dwellings  Collection of residential garbage from multi-family units  Self haul of garbage	. No effect	· Mitigation not required	. No effect
Residential Recycling and Collection  Curbside collection of Blue Box materials Expanding curbside collection Collection of bins of recyclables from multi-famly units Drop-off depot for multi-family residents not serviced by recycling Drop-off depot for rural households	Minor positive effect through more sustainable use of resources and conservation of the environment for future use/enjoyment through recycling.	Mitigation not required	Minor positive effect through more sustainable use of resources and conservation of the environment for future use/enjoyment.
Residential Leaf and Yard Waste Collection Curbside collection of leaf and yard waste Drop-off depot for leaf and yard waste	Costly to start-up and establish but may have environmental benefits in the long run. Uncertain (may be better to have the yard waste composted at the household, e.g., mulch leaves and grass branches) (Lesnicki, 1993)	Evaluate the best approach to management of leaf and yard waste. Address residential on- site multipling, chipping and composting. Could reduce the need for collection costs and costs for large, centralized facilities in the long term.	· Effect uncertain

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting  Backyard composter distribution programs Large 3-bin composting units distributed	Moderately costly to start-up and establish but environmentally beneficial in the long run. Should	· Mitigation not required	Positive effect through support for change in behaviour to reduction and reuse
to apartment and co-operative housing complexes	support change in behaviour to reduction and reuse.		
Other Residential Waste Diversion (HHW, Toxic Taxi, Pilot Wet/Dry, White Goods Collection, White Goods Drop-Off, etc.)		v	
Special curbside collections of Christmas trees     Special and weekly curbside collections	Positive effect through support for change in behaviour to repair and reuse and proper disposal	Mitigation not required	Positive effect through support for change in behaviour to repair, reuse and proper disposal
of white goods  Drop-off depots for white goods  Special curbside collection for bulky			
items in the state of the state			
Special HHW drop-off days  Toxic Taxi service			
Mobile HHW depots			
Composting Facilities			
Centralized windrow composting of leaf     and yard waste	Costly to start-up and establish but environmentally and possibly	· Evaluate the best approach to management of leaf and yard waste.	· Minor positive future generational effect
In-vessel composting of source separated organics	economically beneficial in the long run	Address residential on- site mulching, chipping and composting.	
· Community Composting		could reduce the need for collection costs and costs for large, centralized	
		facilities in the long term.	

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Reuse Centres and Activities			
Municipal reuse centre     Private reuse centre     Non-profit reuse centre     Charitable reuse centres     Food reuse organization     Special goods exchange days	Should encourage/support repair and reuse of white goods etc., reduce the use of resources for manufacture of new products, leaving natural resources for the future.	Province to consider removing     Provincial Sales Tax or other     provincial taxes for the sale of used     goxds	Positive effect through the support for repaired reuse of goxd, and subsequent reduction of resource use.
Public MRFs			
Processing centre for dry recyclables	Costly to start-up and establish because of market development, but environmentally and possibly economically beneficial in the long run. Required support for recycling. Current generation paying the cost for altering behaviour to a more sustainable society.	Mitigation not required	Positive effect as the current generation is paying the cost for changing to more sustainable behaviour.
Residential Recycling Depots and Transfer Stations			
<ul> <li>Drop-off depot for dry recyclable</li> <li>Depots located at transfer stations/landfills</li> </ul>	Costly to start-up but environmentally and possibly economically beneficial in the long run.  Current generation behaviour paying cost for aftering behaviour to a more sustainable society.	Mitigation not required	Positive effect as the current generation is paying the cost for changing to more sustainable behaviour.
Residential Promotion and Education			
38s promotion and education program     Consumer education program	Should have positive effects in changing current attitudes and behaviours to a more sustainable society.	Education material could emphasize the benefits to future generation of 3Rs actions today	Positive effects in changing current attitudes and behaviour to a more sustainable society



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# TABLE H2.1 GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY: GTA CRITERION

: Potential Local Community Impacts

System: Residential Existing/Committed Indicator: Potential Effects on Residents

Component Category/Components	Potential Effects	Mitigation/Enbancement	Component Net Effects
Garbage Collection and Disposal			
Curbside Collection of residential garbage from single family dwellings     Collection of residential garbage from multi-family units     Self haul of garbage     Regional recycling legislation	Effects uncertain with recycling legislation     Other components; No effect	Mitigation not required	Effects uncertain with recycling legislation Other components, No effect
Residential Recycling and Collection			
Curbside collection of Blue Box materials Expanding curbside collection Collection of bins of recyclables from multi-family units Drop-off depot for multi-family residents not serviced by recycling Community recycling centres Recycling at all multi-family buildings of greater than 6 units Blue Box recycling mandated Engineered recycling mandated Engineered recycling depot Drop-off depot for rural households	. No effect	· Mitigation not required	· No effect
Residential Leaf and Yard Waste Collection			
Curbside collection of leaf and yard waste  Drop-off depot for leaf and yard waste	. No effect	· Mitigation not required	· No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting			
Backyard composter distribution programs     Large 3-bin composting units distributed to apartment and co-operative housing complexes	. No effect	Mitigation not required	. No effect
Other Residential Waste Diversion (HHW, Toxic Taxi, Pilot Wet/Dry, White Goods Collection, White Goods Drop-Off, etc.)			
Special curbside collections of Christmas trees     Special and weekly curbside collections of white goods     Drop-off depots for white goods     Special curbside collection for bulky items	. No effect	Mitigation not required	No effect
Permanent drop-off depot for HHW     Special HHW drop-off days     Toxic Taxi service     Mobile HHW depots			

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities			
Contralized windrow composting of leaf and yard waste In-vessel composting of source separated organics Community Composting	Potential nuisance effects:  - odour  - scavenging animals and birds  - visual  - tilegal dumping  - traffe, truck queuing  - noise  - child safety  - property devaluation  - sigma for neighbourhood  - Health concerns  Potential odour effects have been significant enough to have leaf and yard waste compositing facilities closed (RIS, 1993, J. Scott, 1993)  Possible displacement of residents for the location of a new facility.  Potential for odour and vermin problems at composting facility.	Fixing facilities: Proper management of the material must be maintained in reducing odour and seavenging animal problems.  MODE; proposed regulations (MOE; 1993) do not appear to mitigate all of the documented effects.  Composting sites should be located in areas of compatible land use. The sting considerations for these types of facilities should address: odour, heavy truck traffic, truck queung missance and litter.  State-of-the-art odour control features should be design requirements. Local residents should be on the management/monitoring committees (Lesnicki, 1993).  As management of the facility should comply with all operational requirements, the requirements should be reviewed frequently due to the limited experience in composting on a large scale.  Research does not indicate an association between occupational health problems and composting because dose-response issues are not resolved. (Maritato et al., 1992). However, health effects could be monitored for workers and the neighbouring residents over an initial period at the required facility	Potential odour and health concerns and minor nusance effects such as traffic, litter, birds, vermin and noise associated with centralized composting facilities. May be reduced with public education and consultation and proper management.  Possible displacement of residents for the location of a new facility.  Potential for odour and vermin problems at community composting facility.
		(Taylor, 1993).	

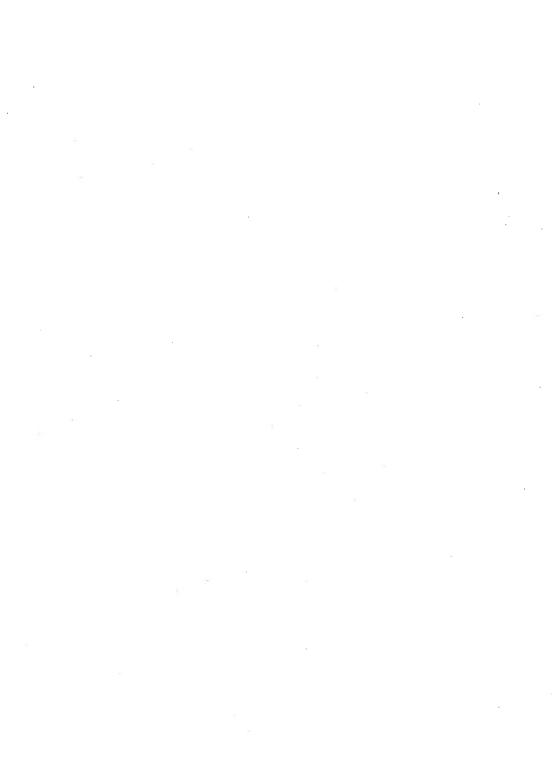
Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities (continued)  Centralized windrow composting of leaf and yard waste In-vessel composting of source separated organics Community Composting	-	Some effects likely to be mitigated over time due to greater familiarity with effects and mitigation (e.g. improvements to siting design, operations and technology).     Proper supervision of community composters	
Reuse Centres and Activities  Municipal reuse centre  Private reuse centre  Non-profit reuse centre  Charitable reuse centres  Food reuse organization  Special goods exchange days	traffic concerns     visual effect of large bins in plazas     centres may not be desirable in all     areas due to stigma	<ul> <li>Locate reuse centres in areas of compatible land use.</li> </ul>	· No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Public MRFs			
Processing centre for dry recyclables     Construct new MRF or improve/expand existing MRFs	Potential nuisance effects:  - luter  - visual  - traffic, truck queuing  - noise  - childrens safety  - property devaluation	Mitigation will need to encompass proper siting and management. Situng: MRF's should be sited in areas of compatible land use. The siting considerations for these types of facilities will need to address; heavy truck traffic, noise, visibility, truck	Potential minor nuisance effects such as traffic, litter and noise. Effects dependent on operation, type of material, sensitivity and number of people near facility.  Possible displacement of
	<ul> <li>illegal dumping at centre</li> <li>Possible displacement of residents from the string of a new facility.</li> </ul>	queung, litter, and the possibility of excess storage (Lesniek, 1993).  Management: The Facility will need to be managed in such a way as to control dust, litter, odour, rodents and other pests, and excess materials. Many of these effects could be controlled by proper site design and planning (berms, forms).	residents from the sting of a new facility.
		Mitigation measures will need to be developed on a system-wide basis for the management of excess materials as a result of over-supply of some material markets. While these materials may not be kept at the MRFs, storage will be required elsewhere. Local residents should be on a monitoring/management committees.	
		Some effects likely to be mitgated over time due to greater familiarity with effects and mitigation (e.g. improvements to sting design, operations and technology). Public consultation program established with local residents to ensure all concerns and effects are addressed.	

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations			
Drop-off depot for dry recyclables     Depots located at transfer     stations/landfills	Potential nuisance effects:  - litter  - visual  - traffic, truck queuing  - noise  - child safety  - property devaluation  - illegal dumping at centre  - Possible displacement from new facilities	Mitigation will need to encompass proper sting and management. Siting: Depots and transfer stations should be sited in areas of compatible land use. These facilities are expected to be significantly smaller in scale than Public MRR1 <sup>35</sup> . The siting considerations for these types of facilities will need to address: truck traffic, possibility of truck queuing, noise, visibility, litter, and possibility of excess storage.  Management: The Facility will need to be control nuisance effects, and excess materials. Many of these effects could be controlled by proper site design and planning (berms, fences, etc.)  Mitigation measures will need to be developed on a system-wide basis for the management of excess materials as a result of over-supply of some material markets. While these materials may not be kept at the depots/transfer stations, storage will be required clsewhere.  Some effects likely to be mitigated over time due to greater familiarity with effects and mitigation (e.g. improvements to siting design, operations and technology).	Potential minor nuisance effects at some facilities Possible displacement from new facilities

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Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Promotion and Education			
3Rs promotion and education program     Consumer education program	· No effect	· Mitigation not required	. No effect



## GENERIC COMPONENTS NET EFFECTS TABLE H2.2

MUNICIPALITY: GTA
CRITERION: Potential Local Community Impacts

System : Residential Existing/Committed Indicator: Potential Effects on Special and Sensitive Groups

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal			
Curbside collection of residential garbage from single family dwellings     Collection of residential garbage from multi-family units     Self haul of garbage     Regional recycling legislation	· No effect	. Mitigation not required	. No effect
Residential Recycling and Collection			
Curbside collection of Blue Box materials Expanding curbside collection Collection of bins of recyclables from multi-family units Drop-off depot for multi-family residents not serviced by recycling Community recycling centres Recycling at all multi-family buildings of greater than 6 units Blue Box recycling mandated Engineered recycling depot Drop-off depot for rural households	Elderly and physically challenged may have difficult time setting out recyclable material for pick-up and using drop-off facilities.	Provide maximum convenience     possible	Elderly and physically challenged may have difficult time setting out recyclable material for pick-up and using drop-off facilities.
Residential Leaf and Yard Waste Collection			
Curbside collection of leaf and yard waste     Drop-off depot for leaf and yard waste	· No effect	· Mitigation not required	· No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting	,		
Backyard composter distribution	Very minor nuisance effects associated with odour and physical	Mitigation not required	· Very minor nuisance effects associated with odour and
Large 3-bin composting units distributed to apartment and co-operative housing complexes	strain on elderly.		physical strain on elderly.
Other Residential Waste Diversion (HIIW, Toxic Taxi, Pilot Wet/Dry, White Goods Collection, White Goods Drop-Off, etc.)			
Special curbside collections of Christmas trees     Special and weekly curbside collections	Possible occupational safety concerns with drivers and handlers of HHW.	· HHW education for drivers and handlers	Minor possible occupational safety concerns with drivers and handlers of HHW.
of white goods  Drop-off depots for white goods  Special curbside collection for bulky			
items  Permanent drop-off depot for HHW			
Special HHW drop-off days Toxic Taxi service			
· Mobile HHW depots			

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities			
Centralized windrow composting of leaf and yard waste     In-wessel composting of source separated organics     Community Composting	Although the research (Curtis et al., 1991) indicates that properly managed composting produces a safe product, there are: Possible health effects on allergy sufferers, people with respiratory allments, people with respiratory allments, possible employee health concerns (Taylor, 1993).	Since the destruction of pathogens in compost is directly proportional to the temperature increases achieved in the piles (Curtus et al., 1991), appropriate operational procedures should be instituted to maximize this destruction.  Prudence dictates that employees should practise proper hygiene and wear protective clothing.  Health effects monitoring for employees and high-risk residents should be an operational condition.	Employees at compost facilities may be exposed to health and safety hazards. Should be minimized by education. Could be mitigated by proper design and control.  Potential for health effects (odours) on allergy sufferers, people with immuno-deficiencies, etc. Magnitude of effect may be minimized by proper sting considerations of new facilities and proper management.
Reuse Centres and Activities			
Municipal reuse centre     Private reuse centre     Non-profit reuse centre     Charitable reuse centres     Food reuse organization     Special goods exchange days	Food contamination issue and liability concerns of donors (Wrigley, 1933) Positive effect for low-income and disabled groups Possible transfer of pests in reuse centers, exchange days, etc.	Train food distribution groups in potential contamination/spoilage. Province to consider "Good Samaritain" Legislation to absolve donor of responsibility.  Cleaning and fumigation of materials.	. No effect
Public MRFs			
Processing centre for dry recyclables     Construct new MRF or improve/expand existing MRFs	Possible employee health/safety concerns	Educate/train employees on health and safety hazards and precautions	<ul> <li>Possible employee health/safety concerns. Should be minimized by muigation.</li> </ul>

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations			
<ul> <li>Drop-off depot for dry recyclable</li> <li>Depots located at transfer stations/landfills</li> </ul>	Possible employee health/safety concerns	<ul> <li>Educate/train employees on health and safety hazards and precautions</li> </ul>	<ul> <li>Possible employee health/safety concerns. Should be minimized by mitigation.</li> </ul>
Residential Promotion and Education			
3Rs promotion and education program     Consumer education program	. No effect	· Mitigation not required	· No effect

## TABLE H2.3 GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY: GTA
CRITERION: Potential 1

CITAPotential Local Community Impacts

System: Residential Existing/Committed Indicator: Potential Effects on Community

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal  Curbside Collection of residential garbage from single family dwellings Collection of residential garbage from multi-family units in three streams Self hauf of garbage Regional recycling legislation	· No effect	· Mitigation not required	. No effect
Residential Recycling and Collection  Curbside collection of Blue Box materials Fapanding curbside collection Collection of bins of recyclables from multi-family units Drop-off depot for multi-family residents not serviced by recycling Community recycling Community recycling centres Recycling at all multi-family buildings of greater than 6 units Blue Box recycling mandated Engineered recycling depot Drop-off depot for rural households	Possible increase in community pride from participation , , , , , , , , , , , , , , , , , , ,	. Mitigation not required	Possible increase in community pride from participation
Residential Leaf and Yard Waste Collection  Curbside collection of leaf and yard waste  Drop-off depot for leaf and yard waste	· No effect	· Mitigation not required	. No effect

Component Net Effects	· No effect	Potential for minor negative stigma effect on community image from illegal dumping	<ul> <li>Possible stigma effect in some communities</li> </ul>
Mitigation/Enhancement	· Mitigation not required	Develop incentives for people to donate useful large items, repair/reuse items or properly dispose of them.     Assistance in organization of community garage sales, flea marketis, etc.     Enforcement for illegal dumping	State-of-the-art odour control     should be an operational condition
Potential Effects	. No effect	Failure of programs tends to have a negative effect on community image. For example, couches, mattresses in vacant lots.	Possible stigma effect in some communities
Component Category/Components	Residential Household Composting  Backyard composter distribution programs  Large 3-bin composting units distributed to apartment and co-operative housing	Other Residential Waste Diversion (HHW, Toxic Taxi, Pilot Wet/Dry, White Goods Collection, White Goods Drop-Off. etc.)  Special curbside collections of Christmas trees Special and weekly curbside collections of white goods Drop-off depots for white goods Special curbside collection for bulky items Permanent drop-off depot for HHW Special HHW depots Toxic Taxi service Mobile HHW depots	Composting Facilities  Centralized windrow composting of leaf and yard waste In-vessel composting of source separated organics Community composting

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Reuse Centres and Activities  Municipal reuse centre  Private reuse centre  Non-profit reuse centre  Charitable reuse centres  Food reuse organization  Special goods exchange days	<ul> <li>Possible stigma effect in some communities.</li> </ul>	<ul> <li>Location of the reuse centres in suitable land use area.</li> </ul>	· No effect
Public MRFs  Processing centre for dry recyclables  Construct new MRF or improve/expand existing MRFs	Possible stigma effect in some communities.	· Mitigation not required	Possible stigma effect in some communities. Magnitude of effect dependant on site location and management of the facility
Residential Recycling Depots and Transfer Stations  Drop-off depot for dry recyclable Depots located at transfer stations/landfills	. No effect	· Mitigation not required	. No effect
Residential Promotion and Education  3Rs promotion and education program  Consumer education program	Possible increase in community     pride	· Mitigation not required	· Possible increase in community pride



## GENERIC COMPONENTS NET EFFECTS TABLE H2.4

MUNICIPALITY: GTA CRITERION

: Potential Local Community Impacts

System: Residential Existing/Committed
Indicator: Potential Effects on Community Features and Businesses

Component Category/Components ,	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal			
Curbside Collection of residential garbage from single family dwellings     Collection of residential garbage from multi-family units     Self haul of garbage     Regional recycling legislation	· No effect	· Mitigation not required	· No effect
Residential Recycling and Collection			
Curtiside collection of Blue Box materials  Expanding curbside collection Collection of bins of recyclables from multi-family units Drop-off depot for multi-family residents not serviced by recycling Community recycling centres Recycling at all multi-family buildings of greater than 6 units Blue Box recycling mandated Engineered recycling depot Drop-off depot for rural households	Possible nuisance effects on community features and businesses from traffic and hauling.	Planning and co-ordination of haulage system to minimally disrupt local community features and businesses	Possible nuisance effects on community features and businesses from traffic and hauling.
Residential Leaf and Yard Waste Collection			
Curbside collection of leaf and yard waste     Drop-off depot for leaf and yard waste	· No effect	· Mitigation not required	· No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting  Backyard composter distribution	· No effect	· Mitigation not required	· No effect
programs Large 3-bin composting units distributed to apartment and co- operative housing complexes			
Other Residential Waste Diversion (HHW, Toxic Taxi, Pilot Wet/Dry, White Goods Collection, White Goods Drop-Off,			
etc.)			
Special curbside collections of Christmas trees	· No effect	· Mitigation not required	· No effect
<ul> <li>Special and weekly curbside collections of white goods</li> </ul>			
• Drop-off depots for white goods			
items		-	
Permanent drop-off depot for HHW	3		
Special HHW drop-off days  Toxic Taxi service			
Mobile HHW depots			

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities			
· Centralized windrow composting of leaf	· Potential nuisance effects:	Existing facilities: Proper management	Potential odour and health
and yard waste	- odour	of the material must be maintained in	concerns and minor nuisance
In-vessel composting of source	- scavenging animals and birds	reducing odour and scavenging animal	effects such as traffic, litter, birds,
separated organics	· visual	problems.	vermin and noise associated with
· Community Composting	- illegal dumping	MOEE proposed regulations (MOEE,	centralized composting facilities.
	- traffic, truck queuing	1993) do not appear to mitigate all of	May be reduced with public
	- noise	the documented effects.	education and consultation and
	- child safety	<ul> <li>Composting sites should be located in</li> </ul>	proper management.
	- property devaluation	areas of compatible land use. The	<ul> <li>Possible displacement of</li> </ul>
	<ul> <li>stigma for neighbourhood</li> </ul>	siting considerations for these types of	community features and businesses
	- Health concerns	facilities should address: odour, heavy	for the location of a new facility.
		truck traffic, truck queuing, nuisance	<ul> <li>Potential for odour and vermin</li> </ul>
	· Potential odour effects have been	and litter.	problems at community
	significant enough to have leaf and	State-of-the-art odour control features	composting facility
	yard waste composting facilities	should be design requirements.	
	closed (RIS, 1993; J. Scott, 1993)	People whom work at local businesses	
	Possible displacement of	and features should be on the	
	community features and businesses	monitoring/management committees	
	for the location of a new facility.	(Lesnicki, 1993).	
		As management of the facility should	
	Potential for odour and vermin	comply with all operational	
	problems at community	requirements, the requirements should	
	composting facility	be reviewed frequently due to the	
		limited experience in composting on a	
		large scale.	

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities (continued)  Centralized windrow composting of leaf and yard waste In-vesset composting of source separated organics Community Composting		Research does not indicate an association between occupational health problems and composting because dose-response issues are not resolved. (Maritato et al., 1992). However, health effects could be monitored over an initial period at the required facility for workers and for people who work nearby (Taylor, 1993).  Some effects likely to be mitigated over time due to greater familiarity with effects and mitigation (e.g. improvements to sting design, operations and technology).  Proper supervision at community composting.	
Reuse Centres and Activities  Municipal reuse centre Private reuse centre Non-profit reuse centre Charitable reuse centres Food reuse organization Special goods exchange days	Minor nuisance related effects on neighbouring features and businesses     Visual blight/image effect	· Mitigation not required	· Minor nuisance effect associated with image

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Public MRFs			
Processing centre for dry recyclables     Construct new MRF or improve/expand existing MRF's	Potential nuisance effects:  - litter  - visual  - traffic, truck queuing  - noise  - childrens safety  - property devaluation  - illegal dumping at centre  - Possible displacement of community features and businesses from the siting of a new facility.	Mitigation will need to encompass proper siting and management. Siting: MRF's should be sited in areas of compatible land use. The siting considerations for these types of facilities will need to address: heavy truck traffic, noise, visibility, truck queuing, litter, and the possibility of excess storage (Lesnicki, 1993). Management: The Facility will need to be managed in such a way as to control dust, litter, odour, trodents and other pests, and excess materials. Many of these effects could be controlled by proper site design and planning (berms, fences, etc.) Some effects likely to be mitigated over time due to greater familiarity with effects and mitigation (e.g. improvements to siting design, operations and technology). Mitigation measures will need to be developed on a system-wide basis for the management of excess materials as a result of over-supply of some material markets. While these material markets. While these material markets. While these on a monitoring/management committees.	Minor nuisance effects such as traffic, litter and noise. Effects dependent on operation, type of material, sensitivity and number of people near facility.  Possible displacement of community features and businesses from the siting of a new facility.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations			
Drop-off depot for dry recyclables Depots located at transfer stations/landfills	Potential nuisance related effects on nearby features and businesses - Litter - Visual - Traffe, truck queuing - Noise - Child safety - Property devaluation - Illegal dumping - Bossible displacement of community features and businesses from location of new facilities.	Siting: Depots and transfer stations should be sited in areas of compatible land use. These facilities are expected to be significantly smaller in scale than Public MRFs. The sting considerations for these types of facilities will need to address: truck traffe, possibility of truck queuing, noise, litter, and possibility of excess storage.  Management: The Facility will need to be managed in such a way as to control dust, litter, odour, rodents and other pests, and excess materials.  Many of these effects could be controlled by proper site design and planning (berms, fences, etc.)  Mitigation measures will need to be developed on a system-wide basis for the management of excess materials as a result of over-supply of some material markets. While these material markets. While these materials may not be kept at the depots, storage will be required elsewhere. Some effects likely to be miligated over time due to greater familiarity with effects and mitigation (e.g. improvements in siting, design operations and technology).	Potential minor nuisance effects on community features and businesses at some facilities.  Possible displacement of community features and businesses from location of new facilities.

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Component Category/Components	rotelluai Ellects	Mitigation/Embancement	Component ivet Effects
Residential Promotion and Education			
3Rs promotion and education program     Consumer education program	. No effect	· Mitigation not required	· No effect



# TABLE H2.5 GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY: GTA CRITERION: Potent

System : Residential Existing/Committed : Potential For Broad Social Impact Indicator: Potential for Lifestyle Changes

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal			
Curbside Collection of residential garbage from single family dwellings Collection of residential garbage from multi-family units Self haul of garbage Regional recycling legislation	· No effect	· Mitigation not required	. No effect
Residential Recycling and Collection			
Curbside collection of Blue Box materials Expanding curbside collection Collection of bins of recyclables from multi-family units Drop-off depot for multi-family residents not serviced by recycling Community recycling centres Recycling at all multi-family buildings of greater than 6 units Blue Box recycling mandated Engineered recycling mandated Engineered recycling depot Drop-off depot for rural households	Potential positive social and lifestyle effect, people willing to do and learn more, source of personal and community pride.  Bins may attract nuisances if not picked up offen.	Ensure convenience of system, weekly or bt-weekly.  Ensure the provision of information and educational services for new residents (Environies, 1990). This must be a continual effort to address turnover and increase in future densities.	Postive social and lifestyle effect, people willing to do and learn more, source of personal and community pride.
Residential Leaf and Yard Waste Collection			
Curbside collection of leaf and yard waste     Drop-off depot for leaf and yard waste	<ul> <li>Positive social and lifestyle effect, people willing to do and learn more, source of personal and community pride</li> </ul>	· Mitigation not required	Positive social and lifestyle effeet, people willing to do and learn more, source of personal and community pride

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting			
Backyard composter distribution programs Large 3-bin composting units distributed to apartment and co-operative housing complexes	Positive social and lifestyle effect, people willing to do and learn more, source of personal and community pride.  Encourages positive local action Inconvenience and annoyance for a minority of people: (e.g., ill-filting lids, insufficient volumes, lack of space, odours, pests, scavenging animals)  Program may have substantial potential to increase waste diversion (MacLaren, 1990; Environics, 1990)	Address complaints (e.g., ill-fitting hids, insufficient volume) of users. Provide kitchen containers, home delivery of composters, on-going subsidies (Environics, 1990; Marchaen, 1990; Metropolitian Works Committee, 1992). On-going education for proper use.	Positive social and lifestyle effect, people willing to do and learn more, source of personal and community pride.  A number of minor lifestyle inconveniences associated with backyard, vermi and multi-family composters (odours, vermin, etc.).

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Other Residential Waste Diversion (HHW, Toxic Taxi, Pilot Wet/Dry, White Goods Collection, White Goods Drop-Off, etc.)			
Special curbside collections of Christmas trees Special and weekly curbside collections of white goods Drop-off depots for white goods Special curbside collection for bulky items Permanent drop-off depot for HHW Special HHW drop-off days Toxic Taxi service Mobile HHW depots	White goods disposal appears to be increasingly inconvenient and difficult; this has resulted in illegal dumping.     Consumers may become much more concerned about size and durability of appliances and furniture.     Residents may become more aware of HHW and white goods management and change purchasing attitudes.	Improved service for white goods and large items.  Develop special waste days and special depots for multi-family building collection.  Make collection drop-off point convenient for all households and/or continue toxic taxi.  Develop promotional/educational materials to emphasize alternatives to HHW for pest control, tawn & garden, cleaning agents, and paint and solvenis. Encourage the use of 3Rs for HHW and the separation of HHW from garbage (Manitoba Hazardous Waste Management Corporation, 1992).	Residents may become more aware of HIIW and white goods management and change purchasing attitudes.
Composting Facilities  Centralized windrow composting of leaf and yard waste In-vessel composting of source separated organics  Community composting	. No effect	. Mitigation not required	. No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Reuse Centres and Activities  Municipal reuse centre  Private reuse centre  Non-profit reuse centre  Charitable reuse centres  Food reuse organization  Special goods exchange days	In some instances, has social welfare benefits  May contribute to acceptance of using repaired/second hand items rather than buying new products. Increased appeal and household economic benefits with future demographic changes. Can contribute to neighbourhood cohesiveness: and provide communal garage sales, fiea markets, bazaars, etc.	Provide incentives for establishing reuse centres and for holding "garage" sales.	In some instances, has social welfare benefits Positive effect may contribute to acceptance of using repaired/second hand items rather than buying new products Increased appeal and household economic benefits with future demographic changes may contribute to neighbourhood cohesiveness through communal garage sales, flea markets, bazaars, etc.
Public MRFs  Processing centre for dry recyclables  Construct new MRF or improve/expand existing MRFs	. No effect	· Mitigation not required	· No effect
Residential Recycling Depots and Transfer Stations  • Drop-off depot for dry recyclable  • Depots located at transfer stations/landfills	· No effect	· Mitigation not required	· No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Promotion and Education			
Consumer education program     Consumer education program	Potentially encourages positive changes to conserver and waste diversion attitudes; emphasizing reduction and reuse, as well as recycling, could lead to lifestyle change     Could increase demand for packaging reduction (Environics, 1990).	Expand and refine promotion/education programs to target non-participating groups and to allow for changes in demographic make-up of GTA (Environics, 1990; Morgan-Frascr, 1993).  Promotional/Faucational programs should be based on successful programs identified in the 3Rs interature (cg., Folz & Hazlett, 1990). For example, pamphlets and brochures (in utility bills, etc.) and community information meetings. The role of the schools could be critical, particularly for new Canadians whose children are receiving the only English instruction in the family. Many School Boards have environmental education committees and the schools are increasingly being led by Principals & V.P.'s eager to spread an environmental message.	Potentially positive effect; encourages changes to conserver and waste diversion attitudes; emphasizing reduction and reuse, as well as recycling, could lead to lifestyle change



## GENERIC COMPONENTS NET EFFECTS TABLE H2.6

MUNICIPALITY: GTA

System : Residential Existing/Committed : Potential For Broad Social Impact Indicator: Potential Effects on Employment CRITERION

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal  Curbside collection of residential garbage from single family dwellings Collection of residential garbage from multi-family units Self hand of garbage from Disposance of the collection of the col	· No effect	· Mitigation not required	. No effect
Residential Recycling and Collection			
Curbside collection of Blue Box materials Expanding curbside collection Collection of bins of recyclables from multi-family units Drop-off depot for multi-family residents not serviced by recycling Community recycling centres Recycling at all multi-family buildings of greater than 6 units Blue Box recycling mandated Engineered recycling depot Drop-off depot for rural households	Direct employment gains, primarily in low skill jobs, are likely in recycling industries and in recycling collection. Indirect effects could include both short and long-term changes in secondary and tertiary employment. Magnitude, timing and direction is uncertain. As recycling becomes more entralized the recycling industries may become more specialized and centralized. Employment opportunities may occur only at one location in the GTA or elsewhere in North America.	A transition to conserver attitudes has major implications for the economy and employees. While many persons in society will adapt easily to changes, others will not. Mitigation is likely to occur as the economy readjusts to 3Rs management. There should be a parineship between government, business and labour to facilitate this change in attitude. Education and re-training will be key components to help the working population adapt to new and evolving sectors in the "green" economy.	Direct employment gains, primarily in low skill jobs, are likely in recycling collection. Indirect effects could include both short and long-term changes in secondary and tertiary employment. Magnitude, tuning and direction is uncertain. As recycling becomes more centralized the recycling industries may become more specialized and centralized. Employment opportunities may occur only at one location in the GTA or elsewhere in North America

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Leaf and Yard Waste Collection			
Curbside collection of leaf and yard waste     Drop-off depot for leaf and yard waste	. No effect	· Mitigation not required	· No effect
Residential Household Composting			
Backyard composter distribution programs     Large 3-bin composting units distributed to apartment and co-operative housing complexes     Community composting	Direct employment gains, primarily in low skill jobs, are likely in the manufacturing of composters, and in the management of the program. Indirect effects could include both short and long term changes in secondary and tertiary employment. Magnitude, timing and direction of effects is uncertain.	has major implications for the economy and employees. While many persons in society will adapt easily to these changes, many will not. Mitigation is likely to occur as the economy readjusts to 3Rs management. There should be a partnership between government, business and labour t facilitate this change in attitude. Education and re-training will be key components to help the working population adapt to new and evolving sectors in the "green" economy.	Direct employment gains, primarily in low skill jobs, are likely in the manufacturing of composters, and in the management of the program. Indirect effects could include both short and long term changes in secondary and tertiary employment. Magnitude, timing and direction of effects is uncertain.

Commonent Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Other Residential Waste Diversion (HHW, Toxic Taxi, Pilot Wet/Dry, White Goods Collection, White Goods Drop-Off, etc.)  Special curbside collections of Christmas trees Special and weekly curbside collections of white goods Drop-off depois for white goods Special curbside collection for bulky items Permanent drop-off depoit for HHW Permanent drop-off depoit for HHW Special HHW drop-off days Toxic Taxi service Mobile HHW depoits	Minor direct employment effect in these programs. Indirect effects could include both short and long term changes in secondary and tertiary employment. Magnitude, timing and direction of effects is uncertain.	A transition to conserver attitudes has major implications for the economy and employees. While many persons in society will adapt easily to these changes, many will not. Mitigation is likely to occur as the economy readjusts to 3Rs management. There should be a partnership between government, business and labour to facilitate this change in attitude. Education and re-training will be key components to help the working population adapt to new and evolving sectors in the "green" economy.	Minor direct employment effect in these programs. Indirect effects could include both short and long term changes in secondary and tertiary employment. Magnitude, timing and direction of effects is uncertain.
Composting Facilities  Centralized windrow composting of leaf and yard waste Invessel composting of source separated organics  Community Composting	Direct employment, primarily in low skill jobs, at the composing facilities and in the management of the program. Indirect effects could include both short and tong term changes in secondary and tertiary employment. Magnitude, liming and direction of effects is uncertain.  Minor short-term increase in construction sector employment.	· Mitigation not required	Direct employment, primarily in low skill jobs, at the composting facilities and in the management of the program. Indirect effects could include both short and long term changes in secondary and tertiary employment. Magnitude, timing and direction of effects is uncertain.  Minor short-term increase in construction sector employment.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Rense Centres and Activities			
Municipal reuse centre     Private reuse centre	Direct employment gains, primarily in low skill jobs, are likely at these	- Mitigation not required	Direct employment gains, primarily in low skill jobs, are
Non-profit reuse centre Charitable reuse centres Foxal reuse organization	centres. Indirect effects could include both short and long term changes in secondary and tertiary		effects could include both short and long term changes in
<ul> <li>Special goods exchange days</li> </ul>	employment. Magnitude, timing and direction of effects is uncertain.		secondary and tertiary employment: Magnitude, timing
			and direction of effects is uncertain.
Public MRFs			
Processing centre for dry recyclables     Construct new MRF or improve/expand	Direct employment is likely to be maintained at the MRFs and in the	Mitigation not required	Direct employment is likely to be maintained at the MRFs and in
existing MR1's	management of the program. Indirect effects could include both		the management of the program. Indirect effects could include both
	short and long term changes in secondary and tertiary employment.		short and long term changes in secondary and tertiary
	Magnitude, timing and direction of effects is uncertain.		employment. Magnitude, timing and direction of effects is
	· Minor short-term increase in		uncertain.
	construction sector employment.		Minor short-term increase in
			construction sector employment.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations			
Drop-off depot for dry recyclable     Depois located at transfer stations/landfills	Direct employment gains, primarily in tow skill jobs, are likely in haulage and in the management of the program. Indirect effects could include both short and long term changes in secondary and tertiary employment. Magnitude, timing and direction of effects is uncertain. Minor short-term increase in construction sector employment.	Mittgation not required	Direct employment gains, primarily in low skill jobs, are likely in haulinge and in the management of the program. Indirect effects could include both short and long term changes in secondary and tertiary employment. Magnitude, timing and direction of effects is uncertain. Minor short-term increase in construction sector employment.
Residential Promotion and Education			
3Rs promotion and education program  Consumer education program	Direct employment gains are likely in printing, production and distribution. Indirect effects could include both short and long term changes in secondary and tertiary employment. Magnitude, timing and direction of effects is uncertain.	A transition to conserver attitudes has major implications for the economy and employees. White many persons in seciety will adapt easily to these changes, many will not. Mitigation is likely to occur as the economy readjusts to 3ks management. There should be a partnership between government, business, and labour to facilitate this change in attitude. Education and re-training will be key components to help the working population adapt to new and evolving sectors in the "green" economy.	Direct employment gains are likely in printing, production and distribution. Indirect effects could meliude both short and long term echanges in secondary and tertiary employment. Magnitude, timing and direction of effects is uncertain.



# TABLE H2.7 GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY: GTA CRITERION: Potent

: GTA System : Residential Existing/Committed : Potential For Broad Social Impact Indicator: Potential Effects on Economic Development

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal			a
Curbside Collection of residential garbage from single family dwellings     Collection of residential garbage from multi-family units     Self haul of garbage     Regional recycling legislation	· No effect	· Mitigation not required	· No effect
Residential Recycling and Collection			
· Curbside collection of Blue Box	· Direct economic benefits are likely	The economic base is shifting from	· Direct economic benefits are likely
materials	in recycling industries, and in	manufacturing to a more service	in recycling industries, and in
· Expanding curbside collection	recycling collection. Indirect	orientation. Along with this trend is	recycling collection. Indirect
· Collection of bins of recyclables from	economic effects could include both	the movement towards a "green"	economic effects could include both
multi-family units	short and long-term changes in	economy. This transition is being	short and long-term changes in
<ul> <li>Drop-off depot for multi-family</li> </ul>	secondary and tertiary sectors.	made by various companies and	secondary and tertiary sectors.
residents not serviced by recycling	Magnitude, timing and direction of	sectors. However, the long-term	Over the long-term, this initiative
· Community recycling centres	effects is uncertain. Over the long-	competitiveness of the region may	could lead to the development of
<ul> <li>Recycling at all multi-family buildings of</li> </ul>	term, this initiative could lead to the	be dependent on the others making	marketable "green" systems,
greater than 6 units	development of marketable "green"	the transition as well. Government,	technologies, and products in the
· Blue Box recycling mandated	systems, technologies, and products	business, and environmental	GTA (Mercer, 1993).
· Engineered recycling depot	in the GTA (Mercer, 1993).	interests should work in partnership	
· Drop-off depot for rural households	<ul> <li>Recycling in all multi-family</li> </ul>	to facilitate this transition (eg.	
	buildings will increase the supply of	Roundtables on the Economy and	
	recyclable material and should	Environment), and grasp the	
	provide better support for recycling	opportunities for marketing "green"	
	industries.	systems and technologies nationally	
		and internationally.	

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Leaf and Yard Waste Collection			
Curbside collection of leaf and yard waste  Drop-off depot for leaf and yard waste	· No effect	· Mitigation not required	. No effect
Residential Household Composting			
Backyard composter distribution programs Large 3-bin composting units distributed to apartment and co-operative housing complexes	Minor direct economic benefits are likely in the manufacturing of composters, and in the management of the program. Indirect economic effects could include both short and long-term changes in secondary and tertiary sectors and cost savings from a reduction in landfill fees, due to reduced volumes. Magnitude, timing and direction of effects is uncertain. Over the long-term, this initiative could lead to the development of marketable "green" products in the GTA (Although the industries could locate elsewhere in North America)	Mitigation not required	Minor direct economic benefits are likely in the manufacturing of composters, and in the management of the program. Indirect economic effects could include both short and long-term changes in secondary and tertiary sectors and cost savings from a reduction in landfill fees, due to reduced volumes.

Mitigation/Enhancement Co	Component Net Effects
is shifting from more service with this trend is strond is strond is strond is being hapanes and he togon may he region may he region may in mental kin partnership sistion (e.g. liconomy and stasp the triketing "green" ogies nationally	Minor direct economic benefits are likely in recycling industries, and in collection. Indirect economic effects could include both short and long-term changes in secondary and long-term changes in secondary and direction of benefits is uncertain.
Env Opp syst	Environment), and grasp the opportunities for marketing "green" systems and technologies nationally and internationally.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities			
Centralized windrow composting of leaf and yard waste     In-vessel composting of source separated organics     Community Composting	Minor direct economic benefits are likely at composting facilities, and in the management of the program. Indirect economic effects could include both short and long-term changes in secondary and tertiary sectors and cost savings from a reduction in landfill fees, due to reduced volumes. Magnitude, timing and direction of effects is uncertain. Over the long-term, this initiative could lead to the development of marketable "green" products in the GTA.	· Mitigation not required	Minor direct economic benefits are likely at composting facilities, and in the management of the program. Indirect economic effects could include both short and long-term changes in secondary and tertiary sectors and cost savings from a reduction in landfill fees, due to reduced volumes. Magnitude, timing and direction of effects is uncertain. Over the long-term, this initiative could lead to the development of marketable "green" products in the GTA.
Reuse Centres and Activities  Municipal reuse centre  Non-profit reuse centre  Charitable reuse centres  Food reuse organization  Special goods exchange days	Minor direct economic benefits are likely at these centres. Indirect economic effects could include both short and long-term changes in secondary and tertiary sectors. Magnitude, timing and direction of effects is uncertain. For example, decreased demand for new products. Over the long-term, this initiative could lead to a viable purchasing option for certain SES groups in the GTA.	·· Mitigation not required	Minor direct economic benefits are likely at these centres. Indirect economic effects could include both short and long-term changes in secondary and tertiary sectors. Magnitude, timing and direction of effects is uncertain.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Public MRFs			
Processing centre for dry recyclables Construct new MRF or improve/expand existing MRFs	Provides the infrastructural support for recycling materials by the private and public sector.  Provides a minor economic benefit in the sector.	The economic base is shifting from manufacturing to a more service orientation. Along with this trend is the movement towards a "green" economy. This transition is being made by various companies and sectors. However, the long-term competitiveness of the region may be dependent on the others making the transition as well. Government, the transition as well. Government, business, and environmental interests should work in partnership to facilitate this transition (eg. Roundtables on the Economy and Environment), and grasp the opportunities for marketing "green" systems and technologies nationally and internationally.	Indirect effect on economic development by providing the infrastructure required for recycling by the private and public sectors.
Residential Recycling Depots and Transfer Stations			
Drop-off depot for dry recyclable     Depots located at transfer stations/landfills	Provides the infrastructural support for recycling materials by the private and public sector.  Provides a minor economic benefit in the sector.	· Mitigation not required	Provides a minor short term economic benefit in the construction sector - Indirect effect on economic development by providing the infrastructure required for recycling by the private and public sectors.

Component Category/Components Pot	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Promotion and Education			
Consumer education program     Consumer education program     D     In     In	Minor direct economic benefits in printing, production and distribution. Indirect economic effects could include both short and long-term changes in secondary and tertiary sectors. Magnitude, timing and direction of effects is uncertain.	· Mitigation not required	• Minor direct economic benefits in printing, production and distribution. Indirect economic effects could include both short and long-term changes in secondary and tertiary sectors. Magnitude, timing tertiary sectors.

## TABLE H2.8 GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY: GTA

System : Residential Existing/Committed

: Potential For Broad Social Impact Indicator: Potential Operational Effects on Institutions, Commercial Enterprises and Industries CRITERION

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal			
Curbside collection of residential garbage from single family dwellings     Collection of residential garbage from multifamily units     Self haul of garbage     Regional recycling legislation	· No effect	· Mitgation not required	· No effect
Residential Recycling and Cöllection			
Curbside collection of Blue Box materials Expanding curbside collection Collection of bins of recyclables from multi-family units Drop-off depot for multi-family residents not serviced by recycling Community recycling Recycling at all multi-family buildings of greater than 6 units Blue Box recycling mandated Ingineered recycling depot Drop-off depot for rural households	All landlords may be required to provide space, facilities and staff time to accommodate recycling and may incur additional costs.	Province to consider additional costs for recycling in annual rent review application.	· Potential increase in costs for tenants
Residential Leaf and Yard Waste Collection			
Curbside collection of leaf and yard waste     Drop-off depot for leaf and yard waste	· No effect	Mitigation not required	· No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting			
Backyard composter distribution programs     Large 3-bin composting units distributed to apartment and co-operative housing complexes	. No effect	· Mitigation not required	· No effect
Other Residential Waste Diversion (IIHW, Toxic Taxi, Pilot Wet/Dry, White Goods Collection, White Goods Drop-Off, etc.)			
Special curbside collections of Christmas frees Special and weekly curbside collections of white goods Drop-off depots for white goods Special curbside collection for bulky items Permanent drop-off depot for HHW Special IHW drop-off days Toxic Taxi service Mobile HHW depots	The efficiency (or ease) of white goods disposal may have an effect on the sale of white goods (customers may want vendors to take back their old products). Because of the increasing inconvenience to consumers in disposing of old appliances/furniture, etc., they may start looking for, and there may be a growing market for, products which are smaller and more durable.	Retail stores could develop buyback programs for large and bulky items. The consumer would then not be required to disperse items.	In the long term institutions and commercial enterprises may develop programs to "buy back" used white goods
Composting Facilities			
Centralized windrow composting of leaf and yard waste In-vessel composting of source separated organics Community composting	. No effect	· Mitigation not required	No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Reuse Centres and Activities			
Municipal reuse centre     Private reuse centre     Non-profit reuse centre     Charlable reuse centres     Food reuse organization     Special goods exchange days	· No effect	· Mitigation not required	· No effect
Public MRFs			
Processing centre for dry recyclables     Construct new MRF or improve/expand existing     MRFs	. No effect	· Mitigation not required	· No effect
Residential Recycling Depots and Transfer Stations			
Drop-off depot for dry recyclable Depots located at transfer stations/landfills	. No effect	· Mitigation not required	. No effect
Residential Promotion and Education			
3Rs promotion and education program     Consumer education program	. No effect	· Mitigation not required	. No effect



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# TABLE H2.9 GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY: GTA

: Distribution of Social Costs and Benefits CRITERION

System: Residential Existing/Committed Indicator: Distribution of Socio-Economic Effects on Industry and Population Groups

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal			
Curbside collection of residential garbage from single family dwellings Collection of residential garbage from multi-family units Self haul of garbage. Regional reveling legislation	· No effect	· Mitigation not required	. No effect
Residential Recycling and Collection			
Curbside collection of Blue Box materials	· No effect	· Mitigation not required	. No effect
Expanding curosus concention Collection of bins of recyclables from multi-family units			
Drop-off depot for multi-family residents not serviced by recycling			
Community recycling centres Recycling at all multi-family buildings of			
greater than 6 units Blue Box recycling mandated			
<ul> <li>Engineered recycling depot</li> <li>Drop-off depot for rural households</li> </ul>			
Residential Leaf and Yard Waste			
Collection			
· Curbside collection of leaf and yard	· No effect	· Mitigation not required	· No effect
waste  Drop-off depot for leaf and yard waste			

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting			
Backyard composter distribution programs Large 3-bin composting units distributed to apartment and co-operative housing complexes	. No effect	Mitigation not required	. No effect
Other Residential Waste Diversion (HHW, Toxic Taxi, Pilot Wet/Dry, White Goods Collection, White Goods Drop-Off, etc.)			
Special curbside collections of Christmas trees     Special and weekly curbside collections of white goods	Residents of some municipalities are provided with white goods and HHW collection, while others are not.	· Mitigation not required	Minor effect in different level of service for white goods and HHW collection in some municipalities.
Special curbside collection for bulky items			
Permanent drop-off depot for HHW     Special HHW drop-off days     Toxic Taxi service     Mobile HHW depots			
Composting Facilities			
Centralized windrow composting of leaf and yard waste     Invessel composting of source senarated	· Local residents and businesses may receive nuisance effects related to compositing for all region residents	Site the composting facility in a non- residential area and away from sensitive industry and committed	Negative distribution effect on some local communities, nomination ergins and
organics Community Composting		uses. Develop appropriate mitgation/ compensation for site	industries.
	7	Address equity issue aspect of the siting process  Mitigation as "Potential Effects on	
		Residents"	

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Reuse Centres and Activities  Municipal reuse centre  Private reuse centre  Non-profit reuse centre	Potential positive effect for lower income groups as more low cost items available and adds potential market	· Mitigation not required	Potential positive effect for lower income groups as more low cost items available and
Charitable reuse centres     Food reuse organization     Special goods exchange days	for their goods.		adds potential market for their goods.
Public MRFs			
Processing centre for dry recyclables     Construct new MRF or improve/expand     existing MRFs	Potential negative distribution effects on some groups living near facility.	<ul> <li>Mugation as "Potential Effects on Residents"</li> </ul>	Potential negative distribution effects on some groups living near facility.
Residential Recycling Depots and Transfer Stations			
<ul> <li>Drop-off depot for dry recyclable</li> <li>Depots located at transfer stations/landfills</li> </ul>	Potential negative distribution effects on some groups living near facility.	<ul> <li>Muigation as "Potential Effects on Residents"</li> </ul>	Potential negative distribution effects on some groups living near facility.
Residential Promotion and Education			
3Rs promotion and education program     Consumer education program	· No effect	· Mitigation not required	. No effect



# TABLE H2.10 GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY: GTA

CRITERION

: GTA
: Distribution of Social Costs and Benefits Indicator

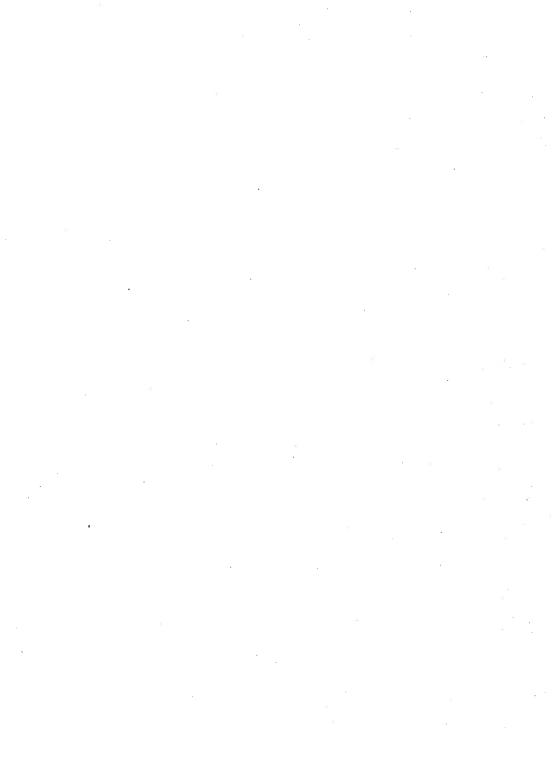
System : Residential Existing/Committed Indicator: Distribution of Lifestyle Effects

Component Category/ Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal			
Curbside collection of residential garbage from single family dwellings     Collection of residential garbage from multi-family units     Self haul of garbage     Regional recycling legislation	· No effect	· Mitigation not required	No effect
Residential Recycling and Collection			
Curbside collection of Blue Box materials Expanding curbside collection Collection of bins of recyclables from multi-family units Drop-off depot for multi-family residents not serviced by recycling Community recycling centres Recycling at all multi-family buildings of greater than 6 units Blue Box recycling mandated Engineered recycling depot Drop-off depot for rural households	Minor difference in lifestyle effects in multi-family and low density development	. Mitigation not required	. Minor lifestyle distributional effect between multi-family and low density residents.

Component Category/ Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Leaf and Yard Waste Collection			
Curbside collection of leaf and yard waste     Drop-off depot for leaf and yard waste	Residents of local municipalities without curbside collection may be required to make a greater change to lifestyle to reduce waste by either taking their leaf and yard waste to a facility or composting it at their residence.	Mitigation not required	. No effect
Residential Household Composting			
Backyard composter distribution programs     Large 3-bin composting units distributed to apartment and cooperative housing complexes	· No effect	· Mitigation not required	. No effect
Other Residential Waste Diversion (HHW, Toxic Taxi, Pilot Wet/Dry, White Goods Collection, White Goods Drop- Off, etc.)			
Special curbside collections of Christmas trees     Special and weekly curbside collections of white goods	. No effect	· Mitigation not required	. No effect
Drop-off depois for white goods  Special curbside collection for bulky items Permanent drop-off depot for HHW Special HHW drop-off days Toxic Taxi service		-	
· Mobile HHW depots			

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Component Category/ Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities			
Centralized windrow composting of leaf and yard waste     In-vessel composting of source separated organics     Community composting	· No effect	Mitigation not required	Lifestyle and quality of life of residents affected near composting facilities, while lifestyle of other regional residents not affected.
Reuse Centres and Activities			
Municipal reuse centre     Private reuse centre     Non-profit reuse centre     Charitable reuse centres     Food reuse organization     Special goods exchange days	. No effect	· Mitgation not required	. No effect
Public MRFs		-	
Processing centre for dry recyclables     Construct new MRF or     improve/expand existing MRFs	. No effect	Mitigation not required	. No effect
Residential Recycling Depots and Transfer Stations			
<ul> <li>Drop-off depot for dry recyclable</li> <li>Depots located at transfer stations/landfills</li> </ul>	. No effect	Mitigation not required	. No effect
Residential Promotion and Education			
3Rs promotion and education program     Consumer education program	No effect	· Mitigation not required	No effect



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### GENERIC COMPONENTS NET EFFECTS TABLE H2.11

MUNICIPALITY: GTA

: Distribution of Social Costs and Benefits CRITERION

System: Residential Existing/Committed
Indicator: Potential Future Generation Effects of System

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal  Curbside Collection of residential	. No effect		,
garbage from single family dwellings Collection of residential garbage from multi-family units Self haul of garbage Regional recycling legislation		· Mitigation not required	· No effect
Residential Recycling and Collection			
Curbside collection of Blue Box	These initiatives could help     maintain the availability of	· The likely over-all benefit to future	Positive effect through more sustainable use of recourses and
· Expanding curbside collection	resources for the use/enjoyment of	in promoting these programs. It	conservation of the environment
Collection of bins of recyclables from multi-family unit	future generations.	needs to be stressed that an the current generation is willing to make	for future use/enjoyment.
· Drop-off depot for multi-family		some sacrifices to ensure the future	
residents not serviced by recycling		prosperity of their	
Community recycling centres     Description at all multi-family buildings		children/grandchildren.	
of greater than 6 units			
· Blue Box recycling mandated			
· Engineered recycling depot			
Drop-on depot for rural nouseholds			

	And the second of the second o		
Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Leaf and Yard Waste Collection	Continue to sense use and anotherists has	D. collingto the board or and consider	. Vose minor office
Curosuce collection of feat and yard waste  Drop-off depot for leaf and yard waste	Costly to start-up and establish out may have environmental benefits in the long run (may be better to have the yard waste composted at the household) (Lesnicki, 1993).	revaluate the best approach to management of leaf and yard waste. Address residential on- site mulching, chipping and composting. Could reduce the need for collection costs and costs for large, centralized facilities in the long term and may poss on the future generation a better process, so less facility management/decommissioning cost.	vely minor enect
Residential Household Composting			
Backyard composter distribution programs     Large 3-bin composting units distributed to apartment and cooperative housing complexes	<ul> <li>Moderately costly to start-up and establish but environmentally beneficial in the long run. Should support change in behaviour to reduction and reuse.</li> </ul>	· Mitigation not required	Positive effect of passing on a healther environment with resources more available through support for change in behaviour to reduction and reuse.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Other Residential Waste Diversion (IIIIW, Toxic Taxi, Pilot Wet/Dry, White Goods Collection, White Goods Drop-Off, etc.)  Special curbside collections of	Positive effect of providing a	? Mitigation not required	Positive effect of providing a
Christmas trees Special and weekly curbside collections of white goods Drop-off depois for white goods Special curbside collection for bulky items Permanent drop-off depoi for HIIW Special HIIW drop-off days Toxic Taxi service Mobile HIIW depois	cleaner environment for the future through support for change in behaviour to repair, reuse and proper disposal.		cleaner environment for the future through support for change in behaviour to repair, reuse and proper disposal
Composting Facilities			
Centralized windrow composting of leaf and yard waste     In-vessel composting of source separated organics     Community composting	Costly to start-up and establish but environmentally and possibly economically beneficial in the long run	<ul> <li>Evaluate the best approach to management of leaf and yard waste.</li> <li>Address residential on- site mulching, empong and composting.</li> <li>Could reduce the need for collection costs and costs for large, centralized facilities in the long term.</li> </ul>	Minor positive future generational effect
Reuse Centres and Activities			
Municipal reuse centre     Private reuse centre     Non-profit reuse centre     Charitable reuse centres     Food reuse organization     Special goods exchange days	Should encourage/support repair and reuse of white goods etc., reduce the use of resources for manufacture of new products, leaving natural resources for the future.	Province could consider removing     Provincial Sales Tax or other     provincial taxes for the sale of used goods	Positive effect through the support for repaired, reused goods, and subsequent reduction of resource use.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Public MRFs			
Processing centre for dry recyclables     Construct new MRF or     improve/expand existing MRFs	Costly to start-up and establish because of market development, but environmentally and possibly economically beneficial in the long	· Mitigation not required	Positive effect as the current generation is paying the cost for changing to more sustainable behaviour, which should leave
	run.  Current generation paying the cost for altering behaviour to a more sustainable society. Required support for recycling.		future generations with cleaner environment and more resources available.
Residential Recycling Depots and Transfer Stations			
<ul> <li>Drop-off depot for dry recyclable</li> <li>Depots located at transfer stations/landfills</li> </ul>	Costly to start-up but environmentally and possibly economically beneficial in the long run.	· Mitigation not required	Positive effect as the current generation is paying the cost for changing to more sustainable behaviour which should leave
	Current generation behaviour paying cost for altering behaviour to a more sustainable society.	*	future generations with cleaner environment and more resources available.
Residential Promotion and Education			
SRs promotion and education program     Consumer education program	Should have positive effects in changing current attitudes and behaviours to a more sustainable society which should leave future generations with cleaner environment and more resources	Education material could emphasize the benefits to future generation of 3Rs actions today	Positive effects in changing current attitudes and behaviour to a more sustainable society which should leave future generations with cleaner environment and more resources available.
	available.		



# TABLE H3.1 GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY: GTA

CRITERION

: Potential Local Community Impacts

System: Residential Direct Cost Indicator: Potential Effects on Residents

	Determinal Effects	Mitigation/Enhancement	Commonent Net Effects
Garbage Collection and Disposal  Direct cost system for garbage collection  Curbside collection of residential garbage from single family dwellings  Collection of residential garbage from	Effects uncertain with regional recycling legislation     Other components, no effect	· Mitigation not required	Effects uncertain with regional recycling legislation     Other components, no effect
mutti-family units  Self haul of garbage Regional recycling legislation Residential Recycling and Collection			
Curbside collection of Blue Box materials     Dispanding curbside collection     Collection of bins of recyclables from	· No effect	Mitigation not required	· No effect
multi-family units  Drop-off depot for multi-family residents not serviced by recycling Community recycling centres Recycling at all multi-family buildness			
of greater than 6 units  Blue Box recycling mandated  Lingineered recycling depot  Drop-off depot for rural households			

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Leaf and Yard Waste Collection			
Curbside collection of leaf and yard waste     Drop-off depot for leaf and yard waste	· No effect	· Mitigation not required	. No effect
Residential Household Composting  Door-to-door distribution of backyard composters to 80% of single family households	· No effect	· Mitigation not required	· No effect
Promotion of vermi-composters to multi-family units     Large 3-bin composting units distributed to apartment and cooperative housing complexes			
Other Residential Waste Diversion (HHW, Toxic Taxi, Pilot Wet/Dry, White Goods Collection, White Goods Drop-Off, etc.)			
Special curbside collections of Christmas trees     Special and weekly curbside collections of white goods     Drop-off depois for white goods     Special curbside collection for bulky	· No effect	· Mitigation not required	. No effect
iems  Permanent drop-off depot for HHW  Special HHW drop-off days  Toxic Taxi service  Mobile HHW depots			

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities			
Community composting  Community composting  Toward organics  Community composting	Potential nuisance effects:  - odour  - scavenging animals and birds - visual - traffic, truck queuing - noise - ehild safety - property devaluation - stigma for neighbourhood - stigma for neighbourhood - health concerns (Morgan-Frazer, 1993; Lesmek, 1993; Scott, 1993; Date, 1903; Cuthill and Taylor, 1993; Date, 1903; Cuthill and Taylor, 1993.  - Potential odour effects have been significant enough to have leaf and yard waste composting facilities closed (RIS, 1993; J. Scott, 1993).  - Possible displacement of residents from the sting of a new facility Potential for odour and vermin probhems at community composting facilities.	Existing facilities: Proper management of the material must be maintained in reducing odour and seavenging animal problems. MOEE; 1993) do not appear to mitigate all of the documented effects.  Composting sites should be located in areas of compatible land use. The siting considerations for these types of facilities should address: odour, heavy truck traffic, truck queung nuisance and litter. State-of-the-art odour control features should be design requirements. Local residents should be on the management/monitoring committees (Lexnick, 1993).  As management of the facility should comply with all operational requirements, the requirements should be reviewed frequently due to the limited experience in composting on a large scale.  Research does not indicate an association between occupational health problems and composting because dose-response issues are not resolved. (Maritato et al., 1992).  However, health effects could be monitored for workers and the neighbouring residents over an initial period at the required facility (Taylor, 1993).	Possible displacement of residents from the sting of a new facility.  Potential odour and health concerns and minor nuisance effects such as traffic, litter, birds, vermin and noise associated with centralized composting facilities. May be reduced with public education and consultation and proper management.  Potential for odour and vermin problems at community composting facilities.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities (continued)			
Centralized windrow composting of leaf and yard waste     In-vessel composting of source separated organics     Community composting		Some effects likely to be mitigated over time due to greater familiarity with effects and mitigation (e.g. improvements to siting design, operations and technology).	·
Reuse Centres and Activities  Municipal reuse centre Private reuse centre Non-profit reuse centre Charitable reuse centres Food reuse organization	Traffic concerns Visual effect of large bins in plazas Centres may not be desirable in all areas due to stigma	· Locate Reuse Centres in areas of compatible land use	No effect
<ul> <li>Special goods exchange days</li> </ul>			

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Public MRFs			
Processing centre for dry recyclables     Construct new MRF or improve/expand existing MRFs	Potential nuisance effects: - litter - visual - traffic, truck queuing - noise - childrens safety - property devaluation - illegal dumping at centre - Possible displacement of residents from the string of a new facility.	Mingation will need to encompass proper sting and management.  Sting MRF's should be sited in areas of compatible land use. The sting considerations for these types of facilities will need to address; heavy truck traffic, noise, visibility, fruck queumg, litter, and the possibility of exerciss storage (Lesnicki, 1993).  Mingation measures will need to be developed on a system-wide basis for the management of exees materials as a result of over-supply of some materials may not be kept at the MRF's, storage will be required elsewhere. Local residents should be on a monitioning/management committees. Some effects likely to be mitigated over time due to greater familiarity with effects and mitigation (e.g. improvements to stung design, operations and technology).  Public consultation program established with local residents to	rosable displacement of residents from the stilling of a new facility.  Minor nuisance effects such as traffic, litter and noise. Effects dependent on operation, type of material, sensitivity and number of people near the facility.
		cnsure all concerns and effects are addressed.	

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations			
Drop-off depot for dry recyclable Depots located at transfer stations/landfills	Potential nusance effects:  Inter  visual  traffic, truck queuing  noise  child safety  property devaluation  illegal dumping at centre  Possible displacement from siting of new facilities.	Mitigation will need to encompass proper siting and management. Siting. Depots and transfer stations should be sited in areas of compatible land use. These facilities are expected to be significantly smaller in scale than Public MRFs. The sting considerations for these types of facilities will need to address: truck traffic, possibility of truck queuing, noise, visibility, litter, and possibility of excess storage.  Management: The Facility will need to be controll nuisance effects, and excess materials. Many of these effects could be controlled by proper site design and planning (berms, fenecs, etc.)  Mitigation measures will need to be developed on a system-wide basis for the management of excess materials as a result of over-supply of some material markets. While these materials may not be kept at the depotskransfer stations, storage will be required elsewhere.	Potential minor nuisance effects at some facilities. Possible displacement from string of new facilities.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Promotion and Education			
Promotion/education program on direct	. No effect	· Mitigation not required	· No effect
cost system			
<ul> <li>Promotion/education program on</li> </ul>			
source reduction/pre-cycling, reuse and			
recycling			
<ul> <li>3Rs promotion and education program</li> </ul>			
<ul> <li>Consumer education program</li> </ul>			



# TABLE H3.2 GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY CRITERION :

: Potential Local Community Impacts

System: Residential Direct Cost Indicator: Potential Effects on Special and Sensitive Groups

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal			
Direct Cost system for garbage collection     Curbside collection of residential garbage from single family dwellings     Collection of residential garbage from multi-family units     Self haul of garbage     Regional recycling legislation	· No effect	· Mittgation not required	. No effect
Residential Recycling and Collection			
Curbside collection of Blue Box materials  Expanding curbside collection  Collection of bins of recyclables from multi-family units  Drop-off depot for multi-family residents not serviced by recycling  Community recycling centres  Recycling at all multi-family buildings of greater than 6 units  Blue Box recycling mandated  Engineered recycling depot  Drop-off depot for rural households	Fiderly/physically challenged may have difficult time setting out recyclables and compostable material for pick-up and using drop-off facilities.	Provide maximum convenience possible.	inconveniences for elderly and physically challenged.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effeets
Residential Leaf and Yard Waste Collection Curbside collection of leaf and yard waste Drop-off depot for leaf and yard waste	. No effect	Mitigation not required	· No effect
Residential Household Composting  Door-to-door distribution of backgard composters to 80% of single family households  Promotion of vermi-composters to multifamily units  Large 3-bin composting units distributed to apartment and co-operative housing complexes	. No effect	Mitigation not required	No effect
Other Residential Waste Diversion (HHW, Toxic Taxi, Pilot Wet/Dry, White Goods Collection, White Goods Drop-Off, etc.)  Special curbside collections of Christmas trees.  Special and weekly curbside collections of white goods  Drop-off depots for white goods  Special curbside collection for bulky items.  Permanent drop-off depot for HHW special LHW drop-off depot for HHW or Special HHW drop-off days  Toxic Taxi service  Mobile HHW depots	Possible occupational safety concerns with drivers and handlers of HHW.	· IIIIW education for drivers and handlers.	Minor possibilities of occupational safety concerns with drivers and handlers of 11HW.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities			
Centralized windrow composting of leaf and yard waste     In-vessel composting of source separated organics     Community Composting	Although the research (Curtis et al., 1991) indicates that properly managed composting produces a safe product, there are:  Possible health effects on allergy sufferers, people with respiratory ailments, people with immunodeficiencies.  Possible employee health concerns (Taylor, 1993).	Since the destruction of pathogens in compost is directly proportional to the temperature increases achieved in the piles (Curtis et al., 1991), appropriate operational procedures should be instituted to maxmize this destruction.  Prudence dicates that employees should practise proper hygiene and wear protective clothing.  Health effects monitoring for employees and when freets monitoring for employees and high-risk residents should be an operational condition.	Employees at compost facilities may be exposed to health and safety hazards. Should be minimized by education. Could be instigated by proper design and control.  Potential for health effects (odours) on allergy sufferers, people with immuno deficiencies, etc.  Magnitude of effect may be minimized by proper siting considerations of new facilities and proper management.
Reuse Centres and Activities  Municipal reuse centre  Private reuse centre  Non-profit reuse centre  Charitable reuse centres  Food reuse organization  Special goods exchange days	Food contamination issue and liability concerns of donors (Wrigley, 1993).  Positive effect for low-income and disabled groups.  Possible transfer of pests in reuse centers, exchange days, etc.	Train food distribution groups in potential contamination/spoilage.     Province to consider "Good Samaritan" Legislation to absolve donor of responsibility.     Cleaning and fumigation of materials.	. No effect
Public MRFs  Processing centre for dry recyclables  Construct new MRF or expand/improve existing MRFs	<ul> <li>Possible employee health/safety concerns</li> </ul>	· Educate/train employees on health and safety hazards and precautions.	Possible employee health/safety concerns should be minimized by mitigation.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations		*	·
<ul> <li>Drop-off depot for dry recyclable</li> <li>Depots located at transfer stations/landfills</li> </ul>	Possible employee health/safety coneerns	Educate/train employees on health     and safety hazards and     precautions.	<ul> <li>Possible employee health/safety concerns should be minimized by mitigation.</li> </ul>
Residential Promotion and Education  • Promotion/education program on direct cost system  • Promotion/education program on source reduction/pre-cycling, reuse and recycling  • 3Rs promotion and education program  • Consumer education program	. No effect	· Mitigation not required	. No effect

### GENERIC COMPONENTS NET EFFECTS TABLE H3.3

MUNICIPALITY: GTA
CRITERION: Potential Local Community Impacts

System: Residential Direct Cost Indicator: Potential Effects on Community

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal  Direct Cost system for garbage collection Curbside collection of residential garbage from single family dwellings Collection of residential garbage from multi-family units Self haul of garbage Regional recycling legislation	<ul> <li>Potential for illegal dumping/burning as resistance to direct cost.</li> </ul>	<ul> <li>Mitigation and enhancement by variable rate schemes, enforcement, expanded 3Rs, etc.</li> </ul>	dumping/burning as resistance to direct cost. Mitigation and enhancement by variable rate schemes, enforcement, expanded 3Rs, etc. should reduce effects.
Residential Recycling and Collection  Curbside collection of Blue Box materials  Expanding curbside collection Collection of bins of recyclables from multi-family units  Drop-off depot for multi-family residents not serviced by recycling Community recycling centres  Recycling at all multi-family buildings of greater than 6 units  Blue Box recycling mandated  Engineered recycling depot  Drop-off depot for rural households	Possible increase in community pride from participation.	· Mittgation not required	Possible increase in community pride from participation.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Leaf and Yard Waste Collection			
Curbside collection of leaf and yard     waste     Drop-off depot for leaf and yard waste	. No effect	· Mitigation not required	. No effect
Residential Household Composting			
Door-to-door distribution of backyard composters to 80% of single family households	. No effect	· Mitigation not required	. No effect
Promotions Promotion of vermi-composters to multi-family units Large 3-bin composting units distributed to apartment and co-operative housing complexes		*	
Other Residential Waste Diversion (HHW, Toxic Taxi, Pilot Wet/Dry, White Goods Collection, White Goods Drop-Off, etc.)			
Special curbside collections of Christmas trees Special and weekly curbside collections of white goods Drop-off depots for white goods Special curbside collection for bulky items Permanent drop-off depot for HHW Special HHW drop-off days Toxic Taxi service Mobile HHW depots	Failure of programs tends to have a negative effect on community image. For example, couches, mattresses in vacant lots.	Develop incentives for people to donate useful large items, repair/reuse items or properly dispose of them.  Assistance in organization of community garage sales, flea markets etc.  Enforcement for illegal dumping.	Minor negative community stigma cffect on community image from illegal dumping.

Component Category/Components	Potential Effects	Mitigation/Enhuncement	Component Net Effects
Composting Facilities  Centralized windrow composting of leaf and yard waste  In-waste composting of source separated organics  Community composting	· Possible stigma effect in some communities.	State-of-the-art odour control should be an operational condition	· Possible stigma effect in some communities
Reuse Centres and Activities  Municipal reuse centre  Private reuse centre  Non-profit reuse centre  Charitable reuse centres  Food reuse organization  Special goods exchange days	<ul> <li>Possible stigma effect in some communities.</li> </ul>	Location of the reuse centres in suitable land use area	. No effect
Public MRFs  Processing centre for dry recyclables  Construct new or improve/expand existing MRF	Possible stigma effect in some communities.	· Mitigation not required	Possible stigma effect and disruption in some communities.     Magnitude of effect dependant on site focation and management of the facility.
Residential Recycling Depots and Transfer Stations  Drop-off depot for dry recyclable  Depots located at transfer stations/landfills	. No effect	- Mitigation not required	. No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Promotion and Education			
Promotion/education program on direct cost system	program on direct · Possible increase in community pride	· Mitigation not required	Possible increase in community pride
<ul> <li>Promotion/education program on source reduction/pre-cycling, reuse and</li> </ul>			
recycling 3Rs promotion and education program			
Consumer education program			

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## GENERIC COMPONENTS NET EFFECTS TABLE H3.4

MUNICIPALITY: GTA CRITERION: Potent

: Potential Local Community Impacts

System : Residential Direct Cost Indicator: Potential Effects on Community Features and Businesses

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal			
Direct Cost system for garbage collection     Curbside collection of residential garbage from single family dwellings     Collection of residential garbage from multi-family units     Self haul of garbage     Regional recycling legislation	. No effect	· Mitigation not required	. No effect
Residential Recycling and Collection			
Curbside collection of Blue Box materials Expanding curbside collection Collection of bins of recyclables from multi-family units Drop-off depot for multi-family residents not serviced by recycling Community recycling Community recycling centres  Recycling at all multi-family buildings of greater than 6 units Blue Box recycling mandated Engineered recycling depot Drop-off depot for rural households	<ul> <li>Possible nuisance effects on community features and businesses from traffic and hauling.</li> </ul>	Planning and co-ordination of haulage system to minimally disrupt local community features and businesses.	Possible very minor nuisance effects on community features and businesses from traffic and hauling.
Residential Leaf and Yard Waste Collection			
Curbside collection of leaf and yard waste Drop-off depot for leaf and yard waste	. No effect	· Mitigation not required	. No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting  Door-to-door distribution of backyard composters to 80% of single family households  Promotion of vermi-composters to multifamily units  Large 3-bin composting units distributed to apartment and co-operative housing complexes	. No effect	· Mitigation not required	. No effect
Other Residential Waste Diversion (HHW, Toxic Taxi, Pilot WetDry, White Goods Collection, White Goods Drop-Off, etc.)  Special curbside collections of Christmas trees  Special and weekly curbside collections of white goods  Drop-off depots for white goods  Special curbside collection for bulky items  Permanent drop-off depot for HHW  Special HHW drop-off days  Toxic Taxi service  Mobile HHW depots	. No esfect	Mitigation not required	. No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities			
Centralized windrow composting of leaf and yard waste In-vessel composting of source separated organics Community composting	Potential nuisance effects:  - odour  - scavenging animals and birds  - visual  - illegal dumping  - traffic, truck queuing  - noise  - child safety  - property devaluation  - stigma  - health concerns  (Morgan-Frazer, 1993) (Lesnicki, 1993) (Scott, 1993) (Lesnicki, 1993) (Scott, 1993) (Lesnicki, 1993) (Cuthill and Taylor, 1993).  - Potential odour effects have been significant enough to have leaf and yard waste composting facilities closed (RIS, 1993; J. Scott, 1993).  - Possible displacement of businesses and community features from siting of new facility.	Existing facilities: Proper management of the material must be maintained in reducing odour and seavenging animal problems. MOIE proposed regulations (MOIE, 1993). Do not appear to mitigate all of the documented effects.  Composting sites should be located in areas of compatible land use. The sting considerations for these types of facilities should address: odour, heavy truck fraffic, truck queuing, noise and litter.  State-of-the-art odour control features should be design requirements. Local residents should be design requirements. Local residents should be too the management/monitoring committees (Lesnicki, 1993).	Potential odour and health concerns and minor nuisance effects such as traffic, litter, birds, vermin and noise associated with centralized composting facilities. May be reduced with public education and consultation and proper management.  Possible displacement of community features and businesses from sting of new facility.
Reuse Centres and Activities  Municipal reuse centre Private reuse centre Non-profit reuse centre Charitable reuse centres Food reuse organization	Minor nuisance related effects on neighbouring features and businesses  Visual blight/image effect	Mitigation not required	. No effect
· Special goods exchange days			

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Public MRFs			
Processing centre for dry recyclables Construct new MRF or improve/expand existing MRFs	Potential nuisance effects:  - litter  - visual  - traffic, truck queuing  - noise  - child safety  - property devaluation  - illegal dumping  - stigma  - stigma  - Stigma  - Possible displacement of community features and businesses from siting new facilities.	Mitigation will need to encompass proper siting and management. Siting: MRF's should be sited in areas of compatible land use. The siting considerations for these types of facilities will need to address: heavy truck traffic, noise, visibility, truck queuing, litter, and the possibility of excess storage (Lesnicki, 1993).  Management: The Facility will need to be managed in such a way as to control dust, litter, odour, rodents and other pests, and excess materials. Many of these effects could be controlled by proper site design and planning (berms, fences, etc.)  Mitigation measures will need to be developed on a system-wide basis for the management of excess materials as a result of over-supply of some material markets. While these materials may not be kept at the MRF's, storage will be required elsewhere.  Local residents should be on a monitoring/management	Possible displacement of community features and businesses from siting of a new facility.  Minor nuisance effects such as traffe, litter and noise. Effects dependent on operation, type of material, sensitivity and number of people near the facility.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations			
Depois located at transfer stations/landfills	Nutsance related effects on nearby features and businesses:  - litter  - visual  - traffic, truck queuing  - noperty devaluation  - illegal dumping  - Possible displacement of community features and businesses from sting of new facilities.	Siting: Depots and transfer stations should be sited in areas of compatible land use. These facilities are expected to be significantly smaller in seale than Public MRI's. The siting considerations for these types of facilities will need to address; truck traffic, possibility of truck queuing, noise, litter, and possibility of excess storage. Management: The Facility will need to be managed in such a way as to control dust, litter, odour, rodents and other pests, and excess materials. Many of these effects could be controlled by proper site design and planning (berms, fences, etc.)  Mingation measures will need to be developed on a system-wide basis for the management of excess materials and not be kept at the MRI's, storage will be required elevabers.	Minor nuisance effects on community features and businesses at some facilities. Possible displacement of community features and businesses from location of new facilities.
		arange and so today as area	

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Promotion and Education			
Promotion/education program on direct	· No effect	· Mitigation not required	· No effect
cost system			
Promotion/education program on source			
reduction/pre-cycling, reuse and recycling		-	
· 3Rs promotion and education program			
· Consumer education program			

H3.4-6

## GENERIC COMPONENTS NET EFFECTS TABLE H3.5

MUNICIPALITY: GTA
CRITERION: Potential For Broad Social Impact

System: Residential Direct Cost Indicator: Potential for Lifestyle Changes

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal  Direct Cost system for garbage collection  Curbside collection of residential garbage from single family dwellings  Collection of residential garbage from multi-family units  Self haul of garbage  Regional recycling legislation	Could potentially support 3Rs by encouraging residents to source separate to reduce the amount of garbage (Environics, 1990). Could potentially lead to greater "contamination" of recyclables as residents maximize use of 3Rs.	Complement direct cost with timely promotion/education program and public consultation program.	Could support 3Rs by encouraging residents to source separate to reduce the amount of garbage. Could lead to greater "contamination" of recyclables as residents maximize use of 3Rs. Complement direct cost with timely promotion/education program and public consultation program.
Residential Recycling and Collection  Curbside collection of Blue Box materials Expanding curbside collection Collection of bins of recyclables from multi-family units Drop-off depor for multi-family residents not serviced by recycling Community recycling centres Recycling at all multi-family buildings of greater than 6 units Blue Box recycling mandated Engineered recycling mandated Engineered recycling depot Drop-off depot for rural households	Positive social and lifestyle effect, people willing to do and learn more, source of personal and community pride (Spaccarelli, Zolik, and Jason, 1989-90).  Bins may attract nuisances if not picked up often.	Ensure convenient location of dropoff point for apartment dwellers. Assistance in the development of 3Rs apartment committees, "Welcome Wagons", etc. Ensure the provision of information and educational services for new residents (Environtes, 1990). This must be a continual effort to address turnover and increase in future densities.  Ensure regular pick-up.	Positive social and lifestyle effect, people willing to do and learn more, source of personal and community pride.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Leaf and Yard Waste Collection			
Curbside collection of leaf and yard     waste     Drop-off depot for leaf and yard waste	<ul> <li>Positive social and lifestyle effect, people willing to do and learn more, source of personal and community pride.</li> </ul>	· Mitigation not required	Positive social and lifestyle effect, people willing to do and learn more, source of personal and community pride.
Residential Household Composting  Door-to-door distribution of backyard composters to 80% of single family households  Promotion of vermi-composters to multifamily units  Large 3-bin composting units distributed to apartment and co-operative housing complexes	Positive social and lifestyle effect, people willing to do and tearn more, source of personal and community pride.  Encourages positive local action. Inconvenience and annoyance for a minority of people: (e.g., ill-fitting lids, insufficient volumes, lack of space, odours, pests, scavenging animals).  Program may have substantial potential to increase waste diversion (MacLaren, 1990, Environies, 1990).  Promotion of vermicomposting in apartments should increase awareness of role of apartment residents in 3Rs and should lead to greater support for and involvement in 3Rs.  Potential odour and vermin problems at community composting facility.  Residents of apartment buildings	Address complaints (e.g., ill-fitting lids, insufficient volume) of users. Provide kitchen containers, home delivery of composters, on-going subsidies (Environics, 1990; Maclaren, 1992). Target apartments with action Promotion/Falcutation programs and consultation program to maximize participation - modify composting program/components as required. Ongoing education for proper use.	Positive social and lifestyle effect, people willing to do and learn more, source of personal and community pride.  Variety of lifestyle inconveniences.
	may experience an increase in insect and rodents, odour and health concerns.		

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Other Residential Waste Diversion (HHW, Toxic Taxi, Pilot Wet/Dry, White Goods Collection, White Goods Drop-Off, etc.)			
Special curbside collections of Christmas trees Special and weekly curbside collections of white goods Drop-off depois for white goods Special curbside collection for bulky items Permanent drop-off depot for IIIIW Special HHW drop-off days Toxic Taxi service Mobile IIIIW depots	White goods disposal appears to be increasingly inconvenient and difficult; this has resulted in illegal dumping.     Consumers may become much more concerned about size and durability of appliances and furniture.  Residents may become more aware of IHHW and white goods management and change purchasing attitudes.	Improved service for white goods and large items  Develop special waste days and special depois for multi-family building collection  Make collection frop-off point convenient for all households and/or continue toxic taxi  Develop promotional/cducational materials to emphasize alternatives to HHW for pest control, lawn & garden, cleaning agents, and paint and solvenis. Encourage the use of 3Rs for HHW and the separation of HHW from garbage (Manitoba Hazardous Waste Management Corporation, 1992).	Residents may become more aware of HIIW and white goods management and change purchasing attitudes.
Composting Facilities  Contralized windrow composting of leaf and yard waste In-vessel composting of source separated organics Community composting	· No effect	· Mitigation not required	. No cífeci

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Reuse Centres and Activities			
· Municipal reuse centre	· In some instances, has social welfare	· Provide incentives for establishing	Positive effect may contribute to
· Private reuse centre	benefits.	reuse centres and for holding	acceptance of using
Non-profit reuse centre     Charitable reuse centres	May contribute to acceptance of using repaired/second hand items	"garage" sales.	repaired/second hand items
· Food reuse organization	rather than buying new products.		In some instances, has social
Special goods exchange days	Increased appeal and household economic benefits with future		welfare benefits.  Increased appeal and household
	demographic changes. Can		economic benefits with future
	contribute to netgnoournood cohesiveness; and provide communal		contribute to neighbourhood
	garage sales, flea markets, bazaars,	•	cohesiveness: through communal
	etc.		garage sales, flea markets, bazaars, etc.
Public MRFs	٠		
Processing centre for dry recyclables     Construct new or improve/expand     existing MRFs	. No effect	· Mitigation not required	· No effect
Residential Recycling Depots and Transfer Stations			
<ul> <li>Drop-off depot for dry recyclable</li> <li>Depots located at transfer stations/landfills</li> </ul>	· No effect	· Mitigation not required	No effect

	Forential Effects	Mitigation/Enhancement	Component Net Effects
Residential Promotion and Education			
Promotion/education program on Direct Cost system  Promotion/education program on source reduction/pre-cycling, reuse and recycling  3Rs promotion and education program  Consumer education program	Potentially encourages positive changes to conserver and waste diversion attitudes, emphasizing reduction and reuse, as well as recycling, could lead to lifestyle change.  Could increase demand for packaging reduction (Environies, 1990).	Expand and refine programs to target non-participating groups and to allow for changes in demographic make-up of GTA (Environics, 1990) (Morgan-Fraser, 1993).  Promotional/Fucational programs should be based on successful programs (e.g., Folz & Hazlett, 1994). For example, pamphlets and brechures (in utility bills, etc.) and community information meetings. The role of the schools could be important, particularly for new Canadians whose children are receiving the only English instruction in the family. Many School Boards have environmental education committees and the schools are increasingly being led by Principals as V.P.'s eager to spread an appropriation approach.	Potentially positive effect; cncourages positive changes to conserver and waste diversion attitudes; emphasizing reduction and reuse, as well as recycling, could lead to lifestyle change.



# TABLE H3.6 GENERIC COMPONENTS NET EFFECTS

: Potential For Broad Social Impact MUNICIPALITY: GTA CRITERION

System: Residential Direct Cost Indicator: Potential Effects on Employment

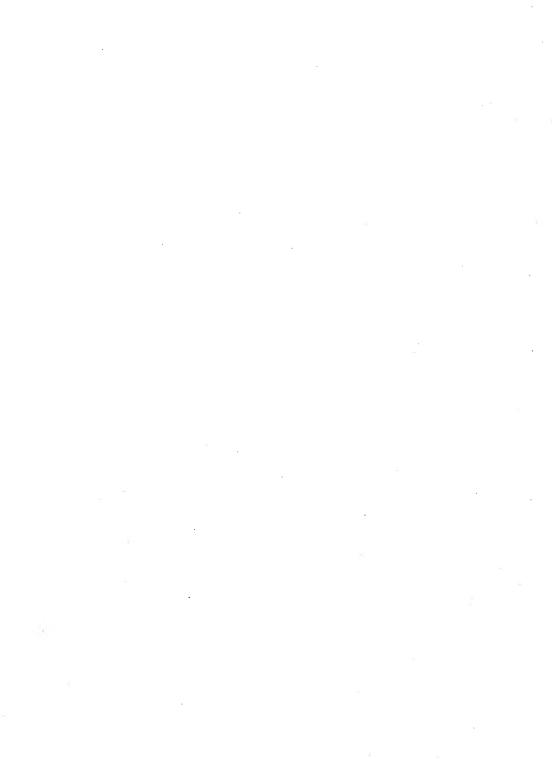
Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal			
Direct Cost system for garbage collection     Curbside collection of residential garbage from single family dwellings     Collection of residential garbage from multi-family units     Self haul of garbage     Regional recycling legislation	. No effect	Mitigation not required	. No effect
Residential Recycling and Collection			
Curbside collection of Blue Box materials  Expanding curbside collection Collection of bins of recyclables from multi-family units  Drop-off depot for multi-family residents not serviced by recycling Community recycling centres Recycling at all multi-family buildings of greater than 6 units Blue Box recycling mandated Engineered recycling depot Drop-off depot for rural households	Direct employment gains, primarily in low skill jobs, are likely in recycling industries and in recycling collection. Indirect effects could include both short and long-term changes in secondary and tertiary employment. Magnitude, timing and direction of effect is uncertain. As recycling becomes more centralized the recycling industries may become more specialized and centralized. Employment opportunities may occur only at one location in the GTA or elsewhere in North America.	A transition to conserver attitudes has major implications for the economy and employees. While many persons in society will adapt easily to changes, others will not. Mitigation is likely to occur as the economy readjusts to 3Rs management. There should be a partnership between government, business and labour to facilitate this change in attitude. Education and re-training will be key components to help the working population adapt to new and evolving sectors in the "green" economy.	Direct employment gains, primarily in low skill jobs, are likely in recycling industries and in recycling collection. Indirect effects could include both short and long-term changes in secondary and tertiary employment. Magnitude, timing and direction of effect is uncertain. As recycling becomes more centralized the recycling industries may become more specialized and centralized. Employment opportunities may occur only at one location in the GTA or elsewhere in North
			Атепса.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Leaf and Yard Waste Collection			
Curbside collection of leaf and yard     waste     Drop-off depot for leaf and yard waste	. No effect	· Mitigation not required	. No effect
Residential Household Composting			
Door-to-door distribution of backyard composters to 80% of single family	Direct employment gains, primarily in low skill jobs, are likely in the	<ul> <li>A transition to conserver attitudes has major implications for the</li> </ul>	Direct employment gains, primarily in low skill jobs, are
households	manufacturing of composters, and in	economy and employees. While	likely in the manufacturing of
Promotion of vermi-composters to multi-	the management of the program.	many persons in society will adapt	composters, and in the
family units	Indirect effects could include both	casily to these changes, many will	management of the program.
Large 3-bin composting units distributed	short and long term changes in	not. Mitigation is likely to occur as	Indirect effects could include both
complexes	Magnitude timing and direction of	me confourly readjasts to sixs management. There should be a	secondary and tertiary
	effects is uncertain.	partnership between government,	employment. Magnitude timing
		business and labour to facilitate this	and direction of effects is
		change in attitude. Education and	uncertain.
		re-training will be key components	
		to help the working population	
		adapt to-new and evolving sectors	
		in the "green" economy.	

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Other Residential Waste Diversion (HIIW, Toxic Taxi, Pilot Wet/Dry, White Goods Collection, White Goods Drop-Off, etc.)		·	
Special curbside collections of Christmas trees     Special and weekly curbside collections of white goods     Drop-off depois for white goods     Special curbside collection for bulky items     Permanent drop-off depot for HHW     Special HHW drop-off days     Toxic Taxi service     Mobile HHW depois	Minor direct employment effect in these programs. Indirect effects could include both short and long term changes in secondary and tertiary employment. Magnitude, timing and direction of effects is uncertain.	- A transition to conserver attitudes has major implications for the economy and employees. While many persons in society will adapt easily to these changes, many will not. Mitigation is likely to occur as the economy readjusts to 3Rs management. There should be a partnership between government, business and labour to facilitate this change in attitude. Education and re-training will be key components to help the working population adapt to new and evolving sectors in the "green" economy.	Minor direct employment effect in these programs. Indirect effects could include both short and long term changes in secondary and tertiary employment. Magnitude, tuming and direction of effects is uncertain.
Composting Facilities  Centralized windrow composting of leaf and yard waste In-vessel composting of source separated organics  Community composting	Direct employment, primarily in low skill jobs, at the compositing facilities and in the management of the program. Indirect effects could include both short and long term changes in secondary and tertiary employment. Magnitude, timing and direction of effects is uncertain.  Minor short-term increase in construction sector employment.	· Mutigation not required	Direct employment, primarily in low skill jobs, at the composting facilities and in the management of the program. Indirect effects could include both short and long term changes in secondary and tertiary employment. Magnitude, timing and direction of effects is uncertain.  Minor short-term increase in construction sector employment.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Reuse Centres and Activities  Municipal reuse centre Private reuse centre Non-profit reuse centre Charitable reuse centres Food reuse organization Special goods exchange days	Direct employment gains, primarily in low skill jobs, are likely at these centres. Indirect effects could include both short and long term changes in secondary and tertiary employment. Magnitude, timing and direction of effects is uncertain.	· Mitigation not required	Direct employment gains, primarily in low skill jobs, are likely at these centres. Indirect effects could include both short and long term changes in secondary and tertiary employment. Magnitude, timing and direction of effects is uncertain.
Public MRFs  Processing centre for dry recyclables  Construct new or improve/expand existing MRFs	Direct employment is likely to be maintained at the MRFs and in the management of the program. Indirect effects could include both short and long term changes in secondary and tertiary employment. Magnitude, timing and direction of effects is uncertain.  Minor short-term increase in construction sector employment.	Mitigation not required	Direct employment is likely to be maintained at the MRFs and in the management of the program. Indirect effects could include both short and long term changes in secondary and tertiary employment. Magnitude, timing and direction of effects is uncertain.  Minor short-term increase in construction sector employment

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations			,
<ul> <li>Drop-off depot for dry recyclable</li> <li>Depots located at transfer</li> <li>stations/landfills</li> </ul>	Direct employment gains, primarily in low skill jobs, are likely in haulage and in the management of the program. Indirect effects could include both short and long term changes in secondary and tertiary employment.  Minor short-term increase in construction sector employment.	Mitgation not required	Direct employment gains, primarily in low skill jobs, are likely in haulage and in the management of the program. Indirect effects could include both short and long term changes in secondary and tertiary employment.  Minor short-term increase in construction sector employment.
Residential Promotion and Education			
Promotion/education program on direct cost system Promotion/education program on source reduction/pre-cycling, reuse and recycling. 3Rs promotion and education program Consumer education program	Direct employment gains are likely in printing, production and distribution. Indirect effects could include both short and long term changes in secondary and tertiary employment. Magnitude, timing and direction of effects is uncertain.	A transition to conserver attitudes has major implications for the economy and employees. While many persons in seciety will adapt easily to these changes, many will not. Mittgation is likely to occur as the economy readjusts to 3Rs management. There should be a partnership between government, business and labour to facilitate this change in attitude. Education and re-training will be key components to help the working population adapt to new and evolving sectors in the "green" economy.	Direct employment gains are likely in printing, production and distribution. Indirect effects could include both short and long term echanges in secondary and tertiary employment. Magnitude, timing and direction of effects is uncertain.



## GENERIC COMPONENTS NET EFFECTS TABLE H3.7

MUNICIPALITY: GTA

CRITERION : Potential For Broad Social Impact

System: Residential Direct Cost Indicator: Potential Effects on Economic Development

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal			
<ul> <li>Direct Cost system for garbage collection</li> </ul>	· No effect	· Mitigation not required	· No effect
· Curbside collection of residential			
garbage from single family dwellings			
<ul> <li>Collection of residential garbage from</li> </ul>			
multi-family units			
<ul> <li>Self haul of garbage</li> </ul>			
<ul> <li>Regional recycling legislation</li> </ul>			

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection		•	
· Curbside collection of Blue Box	Direct economic benefits are likely	The economic base is shifting from	Direct economic benefits are likely
materials	in recycling industries, and in	manufacturing to a more service	in recycling industries, and in
· Expanding curbside collection	recycling collection. Indirect	orientation. Along with this trend is	recycling collection. Indirect
· Collection of bins of recyclables from	economic effects could include both	the movement towards a "green"	economic effects could include both
multi-family units	short and long-term changes in	economy. This transition is being	short and long-term changes in
<ul> <li>Drop-off depot for multi-family</li> </ul>	secondary and tertiary sectors.	made by various companies and	secondary and tertiary sectors.
residents not serviced by recycling	Cost savings from a reduction in	sectors. However, the long-term	Over the long-term, this initiative
<ul> <li>Community recycling centres</li> </ul>	landfill fees due to reduced	competitiveness of the region may be	could lead to the development of
<ul> <li>Recycling at all multi-family buildings of</li> </ul>	volumes. Magnitude, timing and	dependent on the others making the	marketable "green" systems,
greater than 6 units	direction is uncertain. Over the	transition as well. Government,	technologies, and products in the
<ul> <li>Blue Box recycling mandated</li> </ul>	long-term, this initiative could lead	business, and environmental interests	GTA (Mercer, 1993). Mitigation
Engineered recycling depot	to the development of marketable	should work in partnership to	may raise benefits.
<ul> <li>Drop-off depot for rural households</li> </ul>	"green" systems, technologies, and	facilitate this transition (eg.	
	products in the GTA (Mercer,	Roundtables on the Economy and	
	1993).	Environment), and grasp the	
	Recycling in all multi-family	opportunities for marketing "green"	
	buildings will increase the supply of	systems and technologies nationally	
	recyclable material and should	and internationally.	
	industries.		
Residential Leaf and Yard Waste Collection			
· Curbside collection of leaf and yard	. No effect	Mitigation not required	. No effect
Drop-off depot for leaf and yard waste			
		Transaction of the second of t	

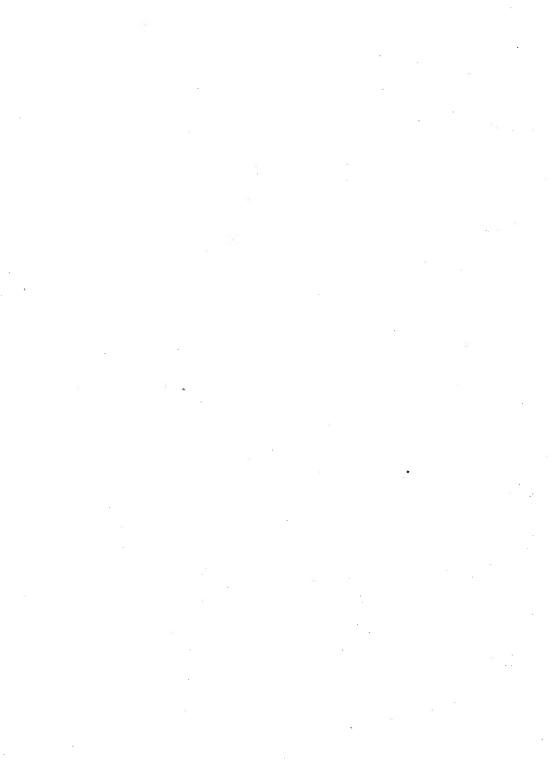
Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting			
Door-to-door distribution of backyard composters to 80% of single family households     Promotion of vermi-composters to multi-family units.     Large 3-bin composting units distributed to apartment and co-operative housing complexes	Minor direct economic benefits are likely in the manufacturing of composters, and in the management of the program. Indirect economic effects could include both short and long-term changes in secondary and tertrary sectors and cost savings from a reduction in landfill fees, due to make the long-term, this initiative could lead to the development of marketable "green" products in the GTA (Although the industries could locate elsewhere in North America).	manufacturing to a more service orientation. Along with this trend is the movement towards a "green" economy. This transition is being made by various companies and sectors. However, the long-term competitiveness of the region may be dependent on the others making the transition as well. Government, business, and environmental interests should work in partinership to facilitate this transition (eg. Roundtables on the Economy and Environment), and grasp the opportunities for marketing "green" systems and technologies nationally and internationally.	Minor direct economic benefits are likely in the manufacturing of composters, and in the management of the program. Indirect economic effects could include both short and long-term changes in secondary and tertiary sectors and cost savings from a reduction in landfill fees, due to reduced volumes.  Magnitude, timing and direction of effects are uncertain.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Other Residential Waste Diversion (HHW, Toxic Taxi, Pilot Wet/Dry, White Goods Collection, White Goods Drop-Off, etc.)			
Special curbside collections of Christmas trees Special and weekly curbside collections of white goods Drop-off depots for white goods Special curbside collection for bulky items Permanent drop-off depot for HHW Special HHW drop-off days Toxic Taxi service Mobile HHW depots	Minor direct economic benefits are likely in recycling industries, and in collection. Indurect economic effects could include both short and long-term changes in secondary and tertiary sectors and cost savings from a reduction in landfill fees, due to reduced volumes.  Magnitude, timing and effects are uncertain. Over the long-term, this initiative could lead to the development of marketable "green" systems, technologies, and products in the GTA (Lesnicki and Mercer, 1993).	The economic base is shifting from manufacturing to a more service orientation. Along with this trend is the movement towards a "green" economy. This transition is being made by various companies and sectors. However, the long-term competitiveness of the region may be dependent on the others making the transition as well. Government, business, and environmental interests should work in partnership to facilitate this transition (eg. Roundtables on the Economy and Environment), and grasp the opportunities for marketing "green" systems and technologies nationally and internationally.	Minor direct economic benefits are likely in recycling industries, and in collection. Indirect economic effects could include both short and long-term changes in secondary and tertiary sectors. Magnitude, timing and effects are uncertain.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities			
Centralized windrow composting of leaf and yard waste     In-wessel composting of source separated organics     Community composting	Minor direct economic benefits are likely at composting facilities. Indirect economic effects could include both short and long-term changes in secondary and tertiary sectors and cost savings from a reduction in landfill fees, due to reduced volumes. Magnitude, timing and effects are uncertain. Over the long-term, this initiative could lead to the development of marketable "green" systems, technologies, and products in the GTA (Lesnicki and Mercer, 1993).	· Mitigation not required	Minor direct economic benefits are likely at composting facilities. Indirect economic effects could include both short and long-term changes in secondary and tertiary sectors and cost savings from a reduction in landfill fees, due to reduction in landfill fees, due to reduced volumes. Magnitude, timing and effects are uncertain. Over the long-term, this initiative could lead to the development of marketable "green" systems, technologies, and products in the GTA (Lesnicki and Mercer, 1993).
Reuse Centres and Activities  Municipal reuse centre  Private reuse centre  Non-profit reuse centres  Charitable reuse centres  Food reuse organization  Special goods exchange days	Minor direct economic benefits are likely at these centres. Indirect economic effects could include both short and long-term changes in secondary and tertiary sectors. Magnitude, timing and effects are uncertain. For example, decreased demand for new products. Over the long-term, this initiative could lead to a visible purchasing option feed to a visible purchasing option.	· Mitigation not required	Minor direct economic benefits are likely at these centres. Indirect economic effects could include both short and long-term changes in secondary and tertiary sectors. Magnitude, timing and effects are uncertain.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Public MRFs			
Processing centre for dry recyclables Construct new MRF or improve/expand existing MRF	Provides the infrastructural support for recycling materials by the private and public sector Provides a minor economic benefit in the construction sector	The economic base is shifting from manufacturing to a more service orientation. Along with this trend is the movement towards a "green" economy. This transition is being made by various companies and sectors. However, the long-term competitiveness of the region may be dependent on the others making the transition as well. Government, business, and environmental interests should work in partnership to facilitate this transition (eg. Roundtables on the Economy and Environment), and grasp the opportunities for marketing "green" systems and technologies nationally and internationally.	Indirect effect on economic development by providing the infrastructure required for recycling by the private and public sectors.  Provides a minor economic benefit in the construction sector.
Residential Recycling Depots and Transfer Stations			
Drop-off depot for dry recyclable     Depots located at transfer     stations/landfills	Provides the infrastructural support for recycling materials by the private and public sector  Provides a minor economic benefit in the sector	Mitigation not required	Provides a minor short term economic benefit in the construction sector. Indirect effect on economic development by providing the infrastructure required for recycling by the private and public sectors

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Promotion and Education			
Promotion/education program on direct     Minor direct economic benefits in	· Minor direct economic benefits in	· Mitigation not required	Minor direct economic benefits in
cost system	printing, production and		printing, production and
Promotion/education program on source	distribution. Indirect economic		distribution. Indirect economic
reduction/pre-cycling, reuse and	effects could include both short and		effects could include both short and
recycling	long-term changes in secondary and	*	long-term changes in secondary and
<ul> <li>3Rs promotion and education program</li> </ul>	tertiary sectors. Magnitude, timing		tertiary sectors. Magnitude, timing
Consumer education program	and direction of effects is uncertain.		and direction of effects is uncertain.



#### BSLOPE

## GENERIC COMPONENTS NET EFFECTS TABLE H3.8

MUNICIPALITY: GTA CRITERION

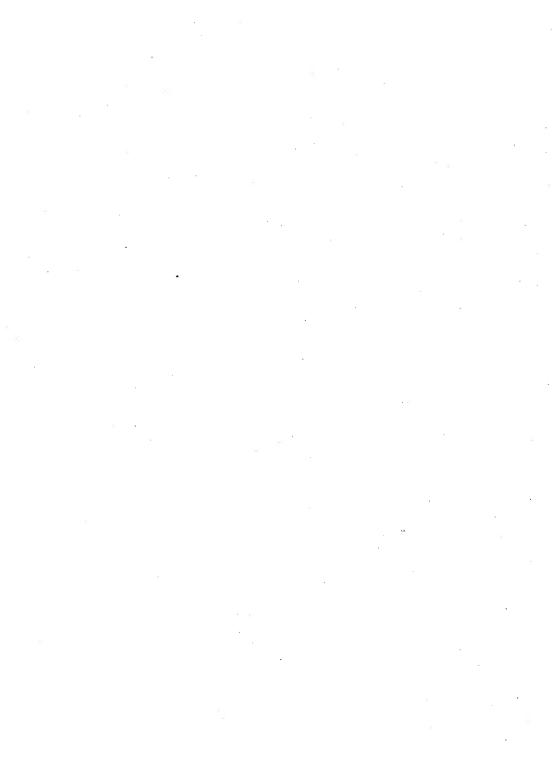
: Potential For Broad Social Impact

System: Residential Direct Cost Indicator: Commercial Enterprises and Industries Indicator: Potential Operational Effects on Institutions, Commercial Enterprises and Industries

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal  Direct Cost system for garbage collection	· Potential increase in cost for	· Landlord to work with residents	Potential increase in costs for
Curbside collection of residential garbage from single family dwellings     Collection of residential garbage from multi-family units     Self haul of garbage     Regional recycling legislation	landlords of apartment buildings that have municipal service.	on 3Rs.	landlords of apartment buildings that have municipal service.
Residential Recycling and Collection			
Curbside collection of Blue Box materials Expanding curbside collection Collection of bins of recyclables from multi-family units Drop-off depot for multi-family residents not serviced by recycling Community recycling centres Recycling at all multi-family buildings of greater than 6 units Blue Box recycling mandated	Direct cost system may add costs to landlords.	Province to consider the additional costs for recycling in annual rent review application.	Potential small increase in costs for tenants.
Fingineered recycling depot Drop-off depot for rural households			
Residential Leaf and Yard Waste Collection			:
Curbside collection of leaf and yard waste.  Drop-off depot for leaf and yard waste.	. No ellect	Mitigation not required	. No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting  Door-to-door distribution of backyard composters to 80% of single family households  Promotion of vermi-composters to multifamily units  Large 3-bin composting units distributed to apartment and co-operative housing complexes	Landlords may be required to provide space and equipment for composters and may experience increased costs associated with insect and rodent control, staff etc.	Landfords to include increase in costs associated with composting services in annual rent review applications.	<ul> <li>Potential increase in costs for tenants and landlords</li> </ul>
Other Residential Waste Diversion (HHW, Toxic Taxi, Pilot Wet/Dry, White Goods Collection, White Goods Drop-Off, etc.)			
Special curbside collections of Christmas trees Special and weekly curbside collections of white goods Drop-off depots for white goods Special curbside collection for bulky items Permanent drop-off depot for HHW Permanent drop-off days Toxic Taxi service Mobile. HHW depots	The efficiency (or ease) of white goods disposal may have an effect on the sale of white goods (customers may want vendors to take back their old products).  Because of the increasing inconvenience to consumers in disposing of old appliances/furniture, etc., they may start looking for, and there may be a growing market for, products which are smaller and more durable.	<ul> <li>Retail stores could develop buyback programs for large and bulky items. The consumer would then not be required to disperse items.</li> </ul>	In the long term, institutions and commercial enterprises may develop programs to "buy back" used white goods.
Composting Facilities			
Centralized windrow composting of leaf and yard waste     In-vessel composting of source separated organics	. No effect	Mitigation not required	. No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Reuse Centres and Activities  Municipal reuse centre	No effect	. Mitigation not required	· No effect
Private reuse centre     Non-profit reuse centre     Charitable reuse centres     Food reuse organization     Special goods exchange days			
Public MRFs			
<ul> <li>Processing centre for dry recyclables</li> <li>Construct new or improve/expand existing MRFs</li> </ul>	. No effeet	Mitigation not required	. No effect
Residential Recycling Depots and Transfer Stations			
Drop-off depot for dry recyclable  Depots located at transfer stations/landfills	· No effect	Mitigation not required	· No effect
Residential Promotion and Education			
Promotion/education program on direct cost system	· No effect	· Mugation not required	· No effect
<ul> <li>Promotion/education program on source reduction/pre-cycling, reuse and recycling</li> <li>3Rs promotion and education program</li> </ul>			
· Consumer education program			



### DCB.SEE

# TABLE H3.9 GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY: GTA

System: Residential Direct Cost

CRITERION : Distribution of Social Costs and Benefits Indicator:

its Indicator: Distribution of Socio-Economic Effects on Industry and Population Groups

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal			
Direct Cost system for garbage collection     Curbside collection of residential garbage from single family dwellings     Collection of residential garbage from multi-family units     Self haul of garbage     Regional recycling legislation	There could be a negative distribution effect as costs for garbage collection could be proportionally higher for larger families and not affordable for lower-income households.	Advise residents of the reasons for collection once a weak (cost savings).  Potentially could consider a special direct cost system for larger and lowincome families.	There could be a negative distribution effect as costs for garbage collection could be proportionally higher for larger families and not affordable for lower-income households.
Residential Recycling and Collection			
Curbside collection of Blue Box materials Expanding curbside collection Collection of bins of recyclables from multi-family units Drop-off depot for multi-family residents not serviced by recycling Community recycling Community recycling centres Recycling at all multi-family buildings of greater than 6 units Blue Box recycling mandated Engineered recycling depot Drop-off depot for rural households	No effect	· Mitigation not required	. No effect
Residential Leaf and Yard Waste Collection			
Curbside collection of leaf and yard waste     Drop-off depot for leaf and yard waste	. No effect	Mitigation not required	. No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting  Door-to-door distribution of backyard composters to 80% of single family households  Promotion of vermi-composters to multifamily units  Tares 3-bin composting units distributed to	· No effect	Mitigation no required	· No effeet
apartment and co-operative housing complexes			
Other Residential Waste Diversion (HHW, Toxic Taxi, Pilot Wet/Dry, White Goods Collection, White Goods Drop-Off, etc.)			
Special curbside collections of Christmas trees     Special and weekly curbside collections of white poods	Residents of some municipalities are provided with white goods and HHW collection, while others are	· Mitigation not required	Minor effect in different level of service for white goods and HHW collection in some municipalities
Drop-off depots for white goods     Special curbside collection for bulky items     Permanent drop-off depot for HHW			
Special HHW drop-off days     Toxic Taxi service     Mobile HHW depots			
Composting Facilities			
Centralized windrow composting of leaf and yard waste     In-vessel composting of source separated	Local residents and businesses may receive nuisance effects related to composting for all region residents.	Site the composting facility in a non- residential area and away from sensitive industry and committed	Negative distribution effect on some local communities, population groups and
organics		uses. Develop appropriate mitigation/ compensation for site related impacts.	industries.
		siting process	

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Reuse Centres and Activities			
· Municipal reuse centre	Positive effect for lower income     aroung as more low cost items	· Mitigation not required	Positive effect for lower income groups as more low cost items.
· Non-profit reuse centre	available and adds potential market		available and adds potential
· Charitable reuse centres	for their goods.		market for their goods.
<ul> <li>Food reuse organization</li> <li>Special goods exchange days</li> </ul>			
Public MRFs			
. Processing centre for dry recyclables	· Potential negative distribution	· Mitigation as "Potential Effects on	· Potential negative distribution
Construct new or improve/expand existing MRF	effects on some groups living near	Residents"	effects on some groups living near facility
Residential Recycling Depots and Transfer Stations			
Drop-off depot for dry recyclable     Depots located at transfer stations/landfills	Potential negative distribution effects on some groups living near facility	<ul> <li>Mitigation as "Potential Effects on Residents"</li> </ul>	Potential negative distribution effects on some groups living near facility
Residential Promotion and Education			
Promotion/education program on direct	· No effect	Mitigation not required	· No effect
December 100 (100 to 100 to 10			
reduction/pre-cycling, reuse and recycling			
3Rs promotion and education program			
· Consumer education program			



# TABLE H3.10 GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY: GTA CRITERION: Distrib

System: Residential Direct Cost s and Benefits Indicator: Distribution of Lifestyle Effects

: Distribution of Social Costs and Benefits Indicato

Component Category/ Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal			
Direct Cost system for garbage collection     Curbside collection of residential garbage from single family dwellings     Collection of residential garbage from multi-family units     Self haul of garbage     Regional recycling legislation	. No effect	· Mitigation not required	· No effect
Residential Recycling and Collection			
Curbside collection of Blue Box materials Expanding curbside collection Collection of bins of recyclables from multi-family units Drop-off depot for multi-family residents not serviced by recycling Community recycling centres Recycling at all multi-family buildings of greater than 6 units Blue Box recycling depot Engineered recycling depot Drop-off depot for rural households	Minor difference in lifestyle effects in multi-family and fow density development.	• Mitigation not required	Minor lifestyle distributional effect between multi-family and low density residents.

Component Category/ Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Leaf and Yard Waste Collection			
Curbside collection of leaf and yard waste     Drop-off depot for leaf and yard waste	Residents of local municipalities without curbside collection may be required to make a greater change to lifestyle to reduce waste by either taking their leaf and yard waste to a facility or composting it at their residence.	· Mitigation not required	No effect
Residential Household Composting			
Door-to-door distribution of backyard composters to 80% of single family households     Promotion of vermi-composters to multipamily units     Large 3-bin composting units distributed to apartment and co-operative housing complexes	· Equitable distribution of service	· Mitigation not required	· Equitable distribution of service
Other Residential Waste Diversion (HHW, Toxic Taxi, Pilot Wet/Dry, White Goods Collection, White Goods Drop-Off, etc.)			
Special curbside collections of Christmas trees     Special and weekly curbside collections of white goods     Drop-off depots for white goods     Special curbside collection for bulky items     Permanent drop-off depot for HHW     Special HHW drop-off days     Toxic Taxi service     Mobile HHW depots	· No effect	· Mitigation not required	. No effect

Component Category/ Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities  Centralized windrow composting of leaf and yard waste In-vessel composting of source separated organics Community composting	· No effect	· Mitigation not required	· No effect
Reuse Centres and Activities  Municipal reuse centre  Private reuse centre  Non-profit reuse centre  Charitable reuse centres  Food reuse organization  Special goods exchange days	. No effect	· Mitigation not required	· No effect
Public MRFs  Processing centre for dry recyclables  Construct new MRF or improve/expand existing MRFs	. No effect	Mitigation not required	. No effect
Residential Recycling Depots and Transfer Stations  Drop-off depot for dry recyclable Depots located at transfer stations/landfills	. No effect	Mutgation not required	. No effect

Component Category/ Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Promotion and Education			
Promotion/education program on direct cost system     Promotion/education program on source reduction/pre-cycling, reuse and recycling     3Rs promotion and education program	. No effect	· Mitigation not required	. No effect
· Consumer education program			

### GENERIC COMPONENTS NET EFFECTS TABLE H3.11

MUNICIPALITY: GTA

: Distribution of Social Costs and Benefits CRITERION

System: Residential Direct Cost Indicator: Potential Future Generation Effects of System

Component Category/Components	Potential Effects	Mitigatlon/Enhancement	Component Net Effects
Garbage Collection and Disposal			
Direct Cost system for garbage collection     Curbside collection of residential garbage from single family dwellings     Collection of residential garbage from multi-family units     Self haul of garbage     Regional recycling legislation	· No effect	· Mitigation not required	. No effect
Residential Recycling and Collection			
Curbside collection of Blue Box materials Expanding curbside collection Collection of bins of recyclables from multi-family units Drop-off depot for multi-family residents not serviced by recycling Community recycling centres Recycling at all multi-family buildings of greater than 6 units Blue Box recycling mandated Engineered recycling depot	Positive effect through more sustainable use of resources and conservation of the environment.	Continue to promote and educate on 3Rs (Hay, ND; Lesnekt, 1993; Morgan-Fraser, 1993; Watson, 1993).  The likely over-all benefit to future generations needs to be cmphasized in promoting these programs. It needs to be stressed that the current generation is willing to make some sacrifices to ensure the future prosperity of their children/transforbildren.	<ul> <li>Positive effect through more sustainable use of resources and conservation of the environment for future use/enjoyment.</li> </ul>

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Leaf and Yard Waste Collection			
Curbside collection of leaf and yard waste     Drop-off depot for leaf and yard waste	Costly to start-up and establish but may have environmental benefits in the long run. May be better to have the yard waste composted at the household; mulch leaves and grass branches (Lesnicki, 1993).	Evaluate the best approach to management of leaf and yard waste. Address residential on- site mulching, chipping and composting. Could reduce the need for collection costs and costs for large, centralized facilities in the long term and may poss on the future generation a better process, so less facility management and decommissioning cost.	. No effect
Residential Household Composting			
Door-to-door distribution of backyard composters to 80% of single family households     Promotion of vermi-composters to multifamily units     Large 3-bin composting units distributed to apartment and co-operative housing complexes	Moderately costly to start-up and establish but environmentally beneficial in the long run. Should support change in behaviour to reduction and reuse.	Promotion and education would increase future participation rates (Environies, 1990).	Positive effect of passing on a healthier environment with resources more available through support for change in behaviour to reduction and reuse.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Other Residential Waste Diversion (HHW, Toxic Taxi, Pilot Wet/Dry, White Goods Collection, White Goods Drop-Off, etc.)  Special curbside collections of Christmas trees  Special and weekly curbside collections of white goods  Drop-off depots for white goods  Special curbside collection for bulky items  Permanent drop-off depot for HHW  Permanent drop-off depot for HHW  Mobile HHW drop-off days  Toxic Taxi service  Mobile HHW depots	Positive effect of providing a cleaner environment for the future through support for change in behaviour to repair, reuse, and proper disposal.	Mitigation not required	<ul> <li>Positive effect of providing a cleaner environment for the future through support for change in behaviour to repair, reuse, and proper disposal.</li> </ul>
Composting Facilities  · Centralized windrow composting of leaf and yard waste · In-vessel composting of source separated organics · Community composting	<ul> <li>Costly to start-up and establish but environmentally and possibly economically beneficial in the long run.</li> </ul>	Evaluate the best approach to management of leaf and yard waste. Address residential on- site mulching, chipping and composting. Could reduce the need for collection costs and costs for large, centralized facilities in the long term.	· Minor positive future generational effect.
Reuse Centres and Activities  Municipal reuse centre  Private reuse centre  Non-profit reuse centre  Charitable reuse centres  Food reuse organization  Special goods exchange days	Should encourage/support repair and reuse of white goods etc., reduce the use of resources for manufacture of new products, leaving natural resources for the future.	<ul> <li>Province to consider removing Provincial Sales Tax or other provincial taxes for the sale of used goods.</li> </ul>	Positive effect through the support for repaired reuse of good, and subsequent reduction of resource use.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Public MRFs			
Processing centre for dry recyclables     Construct new or improve/expand existing     MRFs	Costly to start-up and establish because of market development, but environmentally and possibly economically beneficial in the long run. Current generation paying the cost for altering behaviour to a more sustainable society. Required support for recycling.	· Mitigation not required	Positive effect as the current generation is paying the cost for changing to more sustainable behaviour, which should leave future generations with cleaner environment and more resources available.
Residential Recycling Depots and Transfer Stations			
<ul> <li>Drop-off depot for dry recyclable</li> <li>Depots located at transfer stations/landfills</li> </ul>	Costly to start-up but environmentally and possibly economically beneficial in the long run.     Current generation behaviour paying cost for altering behaviour a more sustainable society.	· Mitigation not required	Positive effect as the current generation is paying the cost for changing to more sustainable behaviour which should leave future generations with cleaner environment and more resources available.
Residential Promotion and Education			
Promotion/education program on Direct     Cost system     Promotion/education program on source     reduction/pre-cycling, reuse and recycling     3Rs promotion and education program     Consumer education program	Should have positive effects in changing current attitudes and behaviours to a more sustainable society which should leave future generations with cleaner environment and more resources available.	Education material could emphasize the benefits to future generation of 3Rs actions today.	Positive effects in changing current attitudes and behaviour to a more sustainable society which should leave future generations with cleaner environment and more resources available.

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# TABLE H4.1 GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY: GTA
CRITERION: Potential Local Community Impacts

System: Residential Expanded Blue Box Indicator: Potential Effects on Residents

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal  Curbside collection of residential garbage from single family dwellings  Collection of residential garbage from multi-family units Self haul of garbage  Designal consultation lengthsing	<ul> <li>Effects uncertain with regional recycling legislation</li> <li>Other components, no effect</li> </ul>	· Mitigation not required	. No effect
Residential Recycling and Collection  Curbside collection of Expanded Blue Box materials  Expanding curbside collection  Collection of bins of recyclables from multi-family units  Drop-off depot for multi-family residents not serviced by recycling  Drop-off depot for rural households  Community recycling centres  Engineered recycling depot  Recycling at all multi-family buildings of greater than 6 units  Blue Box recycling mandated	No effect	· Mitigation not required	. No effect
Residential Leaf and Yard Waste Collection Curbside collection of leaf and yard waste Drop-off depot for leaf and yard waste	. No effect	· Mitigation not required	. No effect

Component Category/Components	Potential Effects	Mitigation/Enhançement	Component Net Effects
Residential Household Composting			
· Backyard composter distribution	No effect	· Mitigation not required	· No effect
programs  Door to door distribution of backyard			
composters to 80% of single family households			
Promotion of vermicomposting to			
multi-family units			
Large 3-bin compositing units     distributed to apartment and			
cooperative housing complexes			
Other Residential Waste Diversion			
(HHW, Toxic Taxi, Pilot Wet-Dry, White			
Goods Collection, White Goods Drop-oil)			
· Special curbside collections of	. No effect	· Mitigation not required	· No effect
Christmas trees			
Special and weekly curbside collections			
of white goods			
<ul> <li>Drop-off depots for white goods</li> </ul>			
Special curbside collection for bulky			
items			
Permanent drop-off depot for			
household hazardous waste (HHW)			
<ul> <li>Special household hazardous waste</li> </ul>			
drop-off days			
· Toxic Taxi service			
· Mobile HHW depots			

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities			
· Centralized windrow composting of leaf	· Potential nuisance effects:	Existing facilities: Proper	· Possible displacement of residents
and vard waste	- odour	management of the material must be	for the siting of a new facility.
· In-vessel composting of source	- scavenging animals and birds	maintained in reducing odour and	· Potential odour and health
separated organics	- visual	scavenging animal problems. MOEE	concerns and minor nuisance
· Community composting	- illegal dumping	proposed regulations (MOEE, 1993)	effects such as traffic, litter, birds,
	- traffic, truck queuing	do not appear to mitigate all of the	vermin and noise associated with
	- noise	documented effects.	centralized composting facilities.
	- child safety	· Composting sites should be located	May be reduced with public
	<ul> <li>property devaluation</li> </ul>	in areas of compatible land use. The	education and consultation and
	<ul> <li>stigma for neighbourhood</li> </ul>	siting considerations for these types	proper management.
	- health concerns	of facilities should address: odour,	<ul> <li>Potential for odour and vermin</li> </ul>
		heavy truck traffic, truck queuing	problems at community
	<ul> <li>Potential odour effects have been</li> </ul>	nuisance and litter. State-of-the-art	composting facility.
	significant enough to have leaf and	odour control features should be	
	yard waste composting facilities	design requirements. Local residents	
	closed (RIS, 1993; J. Scott, 1993)	should be on the	
	Possible displacement of residents for	management/monitoring committees	
	the siting of a new facility.	(Lesnicki, 1993).	
	<ul> <li>Potential for odour and vermin</li> </ul>	<ul> <li>As management of the facility should</li> </ul>	
	problems at community composting	comply with all operational	
	facility.	requirements, the requirements	
0		should be reviewed frequently due to	
		the limited experience in composting	
		on a large scale.	

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities - continued			
Centralized windrow composting of leaf and yard waste In-vessel composting of source separated organics Community composting		Research does not indicate an association between occupational health problems and composting because dose-response issues are not resolved (Maritato et al., 1992). However, health effects could be monitored for workers and the meighbouring residents over an initial period at the required facility (Taylor, 1993). Some effects likely to be mitigated over time due to greater familiarity with effects and mitigation (e.g. improvements to stiing design, operations and technology). Proper supervision of community composting	
Reuse Centres and Activities  Municipal reuse centre Private reuse centre Non-profit reuse centre Charitable reuse centre Charitable reuse centres Food reuse organization Special goods exchange days	Traffic concerns     Visual effect of large bins in plazas     Centres may not be desirable in all areas due to stigma.	Locate Reuse Centres in areas of compatible land use.	· No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Public MRFs			
· Processing centre for dry recyclables	Potential nuisance effects:	· Mitigation will need to encompass	· Possible displacement of residents
· Construct new MRF or	- litter	proper siting and management.	from the siting of a new facility.
improve/expand existing MRF	- visual	· Siting: MRF's should be sited in	· Minor nuisance effects such as
	- traffic, truck quening	areas of compatible land use. The	traffic, litter and noise. Effects
-	- noise	siting considerations for these types	dependent on operation, type of
	- childrens safety	of facilities will need to address:	material, sensitivity and number of
	<ul> <li>property devaluation</li> </ul>	heavy truck traffic, noise, visibility,	people near facility.
	<ul> <li>illegal dumping at centre</li> </ul>	truck queuing, litter, and the	
		possibility of excess storage (Lesnicki,	•
	<ul> <li>Possible displacement of residents</li> </ul>	1993).	
	from the siting of a new facility.	<ul> <li>Management: The Facility will need</li> </ul>	
		to be managed in such a way as to	
		control dust, litter, odour, rodents	
•		and other pests, and excess materials.	
		Many of these effects could be	
		controlled by proper site design and	
		planning (berms, fences, etc.)	
		<ul> <li>Mitigation measures will need to be</li> </ul>	
		developed on a system-wide basis for	
		the management of excess materials	
		as a result of over-supply of some	
		material markets. While these	
		materials may not be kept at the	
		MRFs, storage will be required	
		elsewhere.	
		· Local residents should be on a	
		monitoring/management committee.	

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations			
Drop-off depot for dry recyclables     Depots located at transfer stations	Potential nuisance effects:  Inter  visual  traffic, truck queuing  noise  child safety  property devaluation  illegal dumping at centre  Possible displacement for new facilities.	Mitigation will need to encompass proper siting and management. Siting: Depots and transfer stations should be sited in areas of compatible land use. These facilities are expected to be significantly smaller in scale than Public MRFs. The siting considerations for these types of facilities will need to address: truck traffic, possibility of truck queuing, noise, visibility, litter, and possibility of excess storage. Management: The Facility will need to be control nuisance effects, and excess materials. Many of these effects could be controlled by proper site design and planning (berms, fences, etc.)  Mitigation measures will need to be developed on a system-wide basis for the management of excess materials as a result of over-supply of some material markets. While these material markets. While these materials may not be kept at the depotsyltransfer stations, storage will be required elsewhere.	Potential minor nuisance effects at some facilities.     Possible displacement for new facilities.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Promotion and Education			
Promotion/education program on Expanded Blue Box program     Promotion/education program on source reduction/ pre- cycling/reuse/recycling     3Rs promotion and education program     Consumer education program	. No effect	· Muigation not required	· No effect
0 1			



### GENERIC COMPONENTS NET EFFECTS TABLE H4.2

MUNICIPALITY: GTA

: Potential Local Community Impacts CRITERION

System: Residential Expanded Blue Box Indicator: Potential Effects on Special and Sensitive Groups

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal			
Curbside collection of residential garbage from single family dwellings Collection of residential garbage from multi-family units Self haul of garbage Regional recycling legislation	· No effect	Mitigation not required	. No effect
Residential Recycling and Collection			
Curbside collection of Expanded Blue Box materials Expanding curbside collection Collection of bins of recyclables from multi-family units Drop-off depot for multi-family residents not serviced by recycling Drop-off depot for rural households Community recycling centres Engineered recycling depot Recycling at all multi-family buildings of greater than 6 units Blue Box recycling mandated	Elderly and physically challenged may have difficult time setting out recyclable material for pick-up and using drop-off facilities.	Provide maximum convenience possible.	Elderly and physically challenged may have difficult time setting out recyclable material for pick-up and using drop-off facilities.
Residential Leaf and Yard Waste Collection			
<ul> <li>Curbside collection of leaf and yard waste</li> <li>Drop-off depot for leaf and yard waste</li> </ul>	. No effect	· Mitigation not required	· No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting			
Backyard composter distribution programs     Door to door distribution of backyard	. No effect	· Mitigation not required	No effect
composters to 80% of single family households			
Promotion of vermicomposting to multi-family units			
· Large 3-bin composting units distributed to anartment and			
cooperative housing complexes			
Other Residential Waste Diversion (HHW, Toxic Taxi, Pilot Wet-Dry, White Goods Collection, White Goods Drop-off)			
· Special curbside collections of Christmas trees	<ul> <li>Possible occupational safety concerns with drivers and handlers of HHW.</li> </ul>	<ul> <li>HWW education for driver and handlers.</li> </ul>	<ul> <li>Minor possible occupational safety concerns with drivers and handlers</li> </ul>
Special and weekly curbside collections of white goods     Drop-off depots for white goods     Special curbside collection for bulky		,	оf ИНW.
items  Permanent drop-off depot for household hazardous waste (HHW)			
· Special household hazardous waste			
drop-off days  Toxic Taxi service			
· Mobile HHW depots			

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities			
Centralized windrow composting of leaf and yard waste     In-vessel composting of source separated organics     Community composting	Although the research (Curtis et al., 1991) indicates that properly managed compositing produces a safe product, there are:     Possible health effects on allergy sufferers, people with respiratory allments, people with immunodeficiencies.     Possible employee health concerns (Taylor, 1993).	Since the destruction of pathogens in compost is directly proportional to the temperature increases achieved in the piles (Curis et al., 1991), appropriate operational procedures should be instituted to maximize this destruction.  Prudence dictates that employees should practise proper hygiene and wear protective clothing.  I lealth effects monitoring for employees and high-risk residents should be an operational condition.	Employees at compost facilities may be exposed to death and safety hazards. Should be minimized by education. Could be mitigated by proper design and control.  Potential for health effects (odours) on allergy sufferers, people with immuno-deficiencies, etc.  Magnitude of effect may be minimized by proper siting considerations of new facilities and proper management.
Reuse Centres and Activities			
Municipal reuse centre Private reuse centre Non-profit reuse centre Charitable reuse centres Food reuse organization Special goods exchange days	<ul> <li>Food contamination issue and liability concerns of donors (Wrigley, 1993).</li> <li>Positive effect for low-income and disabled groups.</li> <li>Possible transfer of pests in reuse centers, exchange days, etc.</li> </ul>	Train foxd distribution groups in potential contamination/spollage. Province to consider "Goxd Samaritan" Legislation to absolve donor of responsibility. Cleaning and fumigation of materials.	. No effect
Public MRFs			
Processing centre for dry recyclables Construct new MRF or improve/expand existing MRF	Possible employee health/safety concerns.	Educate/train employees on health and safety hazards and precautions.	Possible employee health/safety concerns. Should be minimized by mitigation.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations			
Drop-off depot for dry recyclables  Depots located at transfer stations	<ul> <li>Possible employee health/safety concerns.</li> </ul>	<ul> <li>Educate/train employees on health and safety hazards and precautions.</li> </ul>	· No effect
Residential Promotion and Education		-	
Promotion/cducation program on Expanded Blue Box program	. No effect	· Mitigation not required	· No effect
Promotion/education program on source reduction/ pre-			
cycling/reuse/recycling 3Rs promotion and education program			
<ul> <li>Consumer education program</li> </ul>			

### TABLE H4.3 GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY: GTA CRITERION: Potent

Potential Local Community Impacts

System: Residential Expanded Blue Box Indicator: Potential Effects on Community

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal			
Curbside collection of residential garbage from single family dwellings Collection of residential garbage from multi-family units Self haul of garbage Regional recycling legislation	· No effect	· Mitigation not required	. No effect
Residential Recycling and Collection			
Curbside collection of Expanded Blue Box materials Expanding curbside collection Collection of bins of recyclables from multi-family units Drop-off depot for multi-family residents not serviced by recycling. Drop-off depot for rural households Community recycling centres Engineered recycling centres Engineered recycling depot Recycling at all multi-family buildings of greater than 6 units Blue Box recycling mandated	Potential mnor traffic inconvenience in communities where materials are sorted at the truck.     Potential increase in community pride from participation.	Mitigation to include proper design of haulage system.	Potential minor traffic inconvenience in communities where materials are sorted at the truck. Effect reduced by mitigation.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Leaf and Yard Waste Collection			e
Curbside collection of leaf and yard waste     Drop-off depot for leaf and yard waste	. No effect	· Mitigation not required	. No effect
Residential Household Composting			
· Backyard composter distribution programs	. No effect	· Mitigation not required	. No effect
Door to door distribution of backyard composters to 80% of single family			
households			
<ul> <li>Promotion of vermicomposting to multi-family units</li> </ul>			
Large 3-bin composting units		-	
distributed to apartment and			
cooperative housing complexes			

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Other Residential Waste Diversion (HHW, Toxic Taxi, Pilot Wet-Dry, White Goods Collection, White Goods Drop- off)			
Special curbside collections of Christmas trees Special and weekly curbside collections of white goods Drop-off depots for white goods Special curbside collection for bulky items Permanent drop-off depot for household hazardous waste drop-off days Toxic Taxi service Mobile IHHW depots	Failure of programs tends to have a negative effect on community image. For example, couches, mattresses in vacant lots.	Develop incentives for people to donate useful large items, repair/reuse items or properly dispose of them.     Assistance in organization of community garage sales, flea markets etc.     Enforcement for illegal dumping.	Minor negative community stigma effect on community image from illegal dumping.
Composting Facilities  Centralized windrow composting of leaf and yard waste In-vessel composting of source separated organics Community composting	<ul> <li>Possible stigma effect in some communities.</li> </ul>	<ul> <li>State-of-the-art odour control should be an operational condition.</li> </ul>	Possible stigma effect in some communities.
Reuse Centres and Activities  Municipal reuse centre Private reuse centre Non-profit reuse centre Charitable reuse centres Food reuse organization Special goods exchange days	<ul> <li>Possible stigma effect in some communities.</li> </ul>	Location of the reuse centres in suitable land use area.	. No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Public MRFs  Processing centre for dry recyclables  Construct new MRF or improve/expand existing MRF	· Possible stigma effect in some communities.	· Mitigation not required	Possible stigma effect and disruption in some communities.     Magnitude of effect dependant on site location and management of the facility.
Residential Recycling Depots and Transfer Stations			
<ul> <li>Drop-off depot for dry recyclables</li> <li>Depots located at transfer stations</li> </ul>	. No effect	. Mitigation not required	· No effect
Residential Promotion and Education			
Promotion/education program on Expanded Blue Box program Promotion/education program on source reduction/ pre-cycling/reuse/recycling	Possible increase in community pride.	Mitigation not required	Possible increase in community pride.
34s promotion and education     program     Consumer education program			,

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### GENERIC COMPONENTS NET EFFECTS TABLE H4.4

MUNICIPALITY: GTA

: Potential Local Community Impacts CRITERION

System: Residential Expanded Blue Box Indicator: Potential Effects on Community Features and Businesses

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal			
Curbside collection of residential garbage from single family dwellings Collection of residential garbage from multi-family units Self haul of garbage Regional recycling legislation	. No effect	. Mitigation not required	No effect
Residential Recycling and Collection			
Curbside collection of Expanded Blue Box materials Expanding curbside collection Collection of bins of recyclables from multi-family units Drop-off depot for multi-family residents not serviced by recycling Drop-off depot for rural households Community recycling centres Engineered recycling centres Engineered recycling deal multi-family buildings of greater than 6 units Blue Box recycling mandated	Possible nuisance effects on community features and businesses from traffic and hauling.	<ul> <li>Planning and co-ordination of haulage system to minimally disrupt local community features and businesses.</li> </ul>	Possible nuisance effects on community features and businesses from traffic and hauling. Effect reduced by mitigation.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Leaf and Yard Waste Collection Curbside collection of leaf and yard waste Drop-off depot for leaf and yard waste	. No effect	Mitigation not required	· No effect
Residential Household Composting  Backyard composter distribution programs  Door to door distribution of backyard composters to 80% of single family households  Promotion of vermicomposting to multi-family units  Large 3-bin composting units distributed to apartment and cooperative housing complexes	· No effect	Mitigation not required	· No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Other Residential Waste Diversion (HHW, Toxic Taxi, Pilot Wet-Dry, White Goods Collection, White Goods Drop- off)			
Special curbside collections of Christmas trees Special and weekly curbside collections of white goods Drop-off depois for white goods Special curbside collection for bulky items Permanent drop-off depot for household hazardous waste drop-off days Toxic Taxi service Mobile HIIW depois	. No effect	· Mitigation not required	. No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities			
Centralized windrow composting of leaf and yard waste In-vessel composting of source separated organics Community composting	Potential nuisance effects:     Odour     Scavenging animals and birds     Visual     Itiegal dumping     Itaffic, truck queuing     noise     child safety     property devaluation     Stigma     Itaffic toncerns     Potential odour effects have been significant enough to have leaf and yard waste composting facilities closed (RIS, 1993, J. Scott, 1993).     Possible displacement of businesses and community features for the sting of a new facility.	Existing facilities: Proper management of the material must be maintained in reducing odour and scavenging animal problems. MOEE proposed regulations (MOEE, 1993). Do not appear to mitigate all of the documented effects.  Composting sites should be located in areas of compatible land use. The sining considerations for these types of facilities should address: odour, heavy truck traffic, truck queuing, noise and litter.  State-of-the-art odour control features should be design requirements. People who work at community features and businesses should be on the management/monitoring committees.	Possible displacement of community features and businesses due to siting of new facility.      Potential odour and health concerns and minor nuisance effects such as traffic, litter, birds, vernin and noise associated with centralized composting facilities. May be reduced with public education and consultation and proper management.
Reuse Centres and Activities  Municipal reuse centre Private reuse centre Non-profit reuse centre Charitable reuse centre Charitable reuse centres Food reuse organization Special goods exchange days	Minor nuisance related effects on neighbouring features and businesses.     Visual blight/image effect.	· · Mitigation not required	· No effeet

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Public MRFs			
· Processing centre for dry recyclables	· Potential nuisance effects:	· Mitigation will need to encompass	· Possible displacement of community
· Construct new MRF or	- litter	proper siting and management.	features and businesses from siting
improve/expand existing MRF	- visual	· Siting: MRF's should be sited in	of new facilities.
	- traffic, truck queuing	areas of compatible land use. The	<ul> <li>Minor nuisance effects such as</li> </ul>
	- noise	siting considerations for these types	traffic, litter and noise. Effects
	- child safety	of facilities will need to address:	dependent on operation, type of
	- property devaluation	heavy truck traffic, noise, visibility,	material, sensitivity and number of
	- illegal dumping	truck queuing, litter, and the	people near the facility.
		possibility of excess storage (Lesnicki,	
	<ul> <li>Possible displacement of community</li> </ul>	1993).	
	features and businesses from siting of	· Management: The Facility will need	
	new facilities.	to be managed in such a way as to	
		control dust, litter, odour, rodents	
		and other pests, and excess materials.	
		Many of these effects could be	
		controlled by proper site design and	
		planning (berms, fences, etc.)	
		<ul> <li>Mitigation measures will need to be</li> </ul>	
		developed on a system-wide basis for	
		the management of excess materials	
		as a result of over-supply of some	
		material markets. While these	
		materials may not be kept at the	
		MRFs, storage will be required	
		elsewhere.	
		· Local residents should be on a	
		monitoring/management committee.	

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Component Category/Components	Potential Effects	Mitigation/Ennancement	Component iver gueres
Residential Recycling Depots and Transfer Stations			
		· Siting: Depots and transfer stations	<ul> <li>Minor nuisance effects on</li> </ul>
· Drop-off depot for dry recyclables	· Nuisance effects:	should be sited in areas of	community features and businesses
Depots located at transfer stations	- litter	compatible land use. These facilities	at some facilities.
	- visual	are expected to be significantly	<ul> <li>Possible displacement of community</li> </ul>
	- traffic, truck quening	smaller in scale than Public MRFs.	features and businesses from
	- noise	The siting considerations for these	location of new facilities.
	- child safety	types of facilities will need to	
	<ul> <li>property devaluation</li> </ul>	address: truck traffic, possibility of	
	- illegal dumping	truck queuing, noise, litter, and	
		possibility of excess storage.	
	<ul> <li>Possible displacement of community</li> </ul>	· Management: The Facility will need	
	features and businesses from siting of	to be managed in such a way as to	
	new facilities.	control dust, litter, odour, rodents	
		and other pests, and excess materials.	
		Many of these effects could be	
		controlled by proper site design and	
		planning (berms, fences, etc.)	
		Mitigation measures will need to be	
		developed on a system-wide basis for	
		the management of excess materials	
		as a result of over-supply of some	
		material markets. While these	
		materials may not be kept at the	
		MRFs, storage will be required	
		elsewhere.	

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Promotion and Education			
Promotion/education program on Expanded Blue Box program Promotion/education program on source reduction/ precycling/reuse/recycling 3Rs promotion and education program	. No effect	- Mitigation not required	. No effect
Consumer education program			



# TABLE H4.5 GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY: GTA CRITERION: Potent

: GTA System : Expanded Blue Box : Potential For Broad Social Impact Indicator: Potential for Lifestyle Changes

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal			
Curbside collection of residential garbage from single family dwellings     Collection of residential garbage from	. No effect	. Mitigation npt required	. No effect
multi-family units Self haul of garbage			
· Regional recycling legislation			
Residential Recycling and Collection			
Curbside collection of Expanded Blue	· Positive social and lifestyle effect,	· Ensure convenient location of drop-	· Positive social and lifestyle effect,
Box materials	people willing to do and learn more,	off point for apartment dwellers.	people willing to do and learn
Expanding curbside collection	source of personal and community	Assistance in the development of	more, source of personal and
Collection of bins of recyclables from     multi-family units	pride.	3Rs apartment committees,	community pride.
· Drop-off depot for multi-family	picked up often.	Ensure the provision of information	
residents not serviced by recycling		and educational services for new	
<ul> <li>Drop-off depot for rural households</li> </ul>		residents (Environics, 1990). This	
· Community recycling centres		must be a continual effort to address	
· Engineered recycling depot		turnover and increase in future	
Recycling at all multi-family buildings of		densities.	
greater than 6 units		· Ensure regular pick-up.	
Blue Box recycling mandated			

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Leaf and Yard Waste Collection Curbside collection of leaf and yard waste Drop-off depot for leaf and yard waste	Positive social and lifestyle effect, people willing to do and learn more, source of personal and community pride	· Mitigation not required	<ul> <li>Positive social and lifestyle effect, people willing to do and learn more, source of personal and community pride.</li> </ul>
Residential Household Composting			
Backyard composter distribution programs     Door to door distribution of backyard composters to 80% of single family households     Promotion of vermicomposting to multifamily units     Large 3-bin composting units distributed to apartment and cooperative housing complexes	Positive social and lifestyle effect, people willing to do and learn more, source of personal and community pride.  Encourages positive local action.  Inconvenience and annoyance for a minority of people (e.g., ill-fitting lids, insufficient volumes, lack of space, odours, pests, scaverging animals).  Promotion of vermicomposting in apartments should increase awareness of role of apartment residents in 3Rs and should lead to greater support for and involvement in 3Rs.  Residents of apartment buildings may experience and increase an insects and rodents, odour and health concerns.	Address complaints (e.g., ill-fitting lids, insufficient volume) of users.  Provide ktichen containers, home delivery of composters, on-going subsidies (Environies, 1990; Maclaren, 1990; Maclaren, 1990; Metropolitan Works Committee, 1992).  Target apartments with action Promotion/Falucation programs and consultation program to maximize participation - modify composting program/components as required.  On-going education for proper use.	Positive social and lifestyle effect, people willing to do and learn more, source of personal and community pride.  Supports other 3Rs activities.  Variety of lifestyle inconveniences

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Other Residential Waste Diversion (HIIW, Toxic Taxt, Pilot Wet-Dry, White Goods Collection, White Goods Drop-off)  Special curbside collections of Christmas trees Special and weekly curbside collections of white goods Drop-off depots for white goods Drop-off depots for white goods Special curbside collection for bulky items Permanent drop-off depot for household hazardous waste (HIIW) Special household hazardous waste drop-off days Toxic Taxi service Mobile HIIW depots	White goods disposal appears to be increasingly inconvenient and difficult; this has resulted in illegal dumping.     Consumers may become much more concerned about size and durability of appliances and furniture.     Residents may become more aware of IIII when white goods management and change purchasing attitudes.	Improved service for white goods and bulky items. Develop special waste days and special depots for multi-family building collection. Make collection. Make collection drop-off point convenient for all households and/or continue toxic tax. Develop promotional/educational materials to emphasize alternatives to HIW for pest control, lawn & garden, cleaning agents, and paint and solvenis. Fincourage the use of	Residents may become more aware of HIIW and white goxds management and change purchasing attitudes.
		3Rs for IIIIW and the separation of IIIIW from garbage (Manitoba Hazardous Waste Management Corporation, 1992).	
Composting Facilities			
Centralized windrow composting of leaf and yard waste     In-vessel composting of source separated organics     Community composting	No effect	Mitigation not required	. No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Reuse Centres and Activities  Municipal reuse centre  Private reuse centre  Non-prolit reuse centre  Charitable reuse centres  Food reuse organization  Special goods exchange days	In some instances, has social welfare benefits. May contribute to acceptance of using repaired/second hand items rather than buying new products. Increased appeal and household economic benefits with future demographic changes. Can contribute to neighbourhood cohesiveness; and provide communal garage sales, flea markets, bazaars, etc.	<ul> <li>Provide incentives for establishing reuse centres and for holding "garage" sales.</li> </ul>	Positive effect may contribute to acceptance of using repaired/second hand items rather than buying new products.  In some instances, has social welfare benefits.  Increased appeal and household economic benefits with future demographic changes. May contribute to neighbourhood cobesiveness: through communal garage sales, flea markets, bazaars, etc.
Public MRFs	*	•	
Processing centre for dry recyclables     Construct new MRF or improve/expand     existing MRF	· No effect	Mitigation not required	· No effect
Residential Recycling Depots and Transfer Stations		¥	
<ul> <li>Drop-off depot for dry recyclables</li> <li>Depots located at transfer stations</li> </ul>	· No effect	· Mitigation not required	· No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Promotion and Education			
Promotion/education program on Expanded Blue Box program	<ul> <li>Potentially encourages positive changes to conserver and waste</li> </ul>	Expand and refine promotion/education programs to	<ul> <li>Potentially positive effect; encourages positive changes to</li> </ul>
<ul> <li>Promotion/education program on source reduction/ pre-</li> </ul>	diversion attitudes, emphasizing reduction and reuse, as well as	target non-participating groups and to allow for changes in demographic	conserver and waste diversion attitudes; emphasizing reduction
cycling/reuse/recycling 38s promotion and education program	recycling, could lead to lifestyle change.	make-up of GTA (Environics, 1990; Morgan-Fraser, 1993).	and reuse, as well as recycling, could lead to lifestyle change.
· Consumer education program	Could increase demand for packaging reduction (Environics, 1990).	Promotional/Educational programs     should be based on successful	
		programs (e.g., Folz & Hazlett,	
		1990). For example, pamphlets and brochures (in utility bills, etc.) and	
		community information meetings.	
		The role of the schools could be	
		important, particularly for new Canadians whose children are	
		receiving the only English instruction	
		in the family. Many School Boards	
		have environmental education	
		committees and the schools are	
		increasingly being led by Principals	
		& V.P.'s eager to spread an	
		environmental message.	



## GENERIC COMPONENTS NET EFFECTS TABLE H4.6

MUNICIPALITY: GTA

System : Residential Expanded Blue Box : Potential For Broad Social Impact Indicator: Potential Effects on Employment CRITERION

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal			
Curbside collection of residential garbage from single family dwellings. Collection of residential garbage from multi-family units. Self haul of garbage. Regional recycling legislation.	· No effect	· Mitigation not required	· No effect
Residential Recycling and Collection			
Curbside collection of Expanded Blue	Direct employment gains, primarily in	A transition to conserver attitudes	· Direct employment gains, primarily
Box materials	low skill jobs, are likely in recycling	has major implications for the	in low-skill jobs, are likely in
· Expanding curbside collection	industries and in recycling collection.	economy and employees. While	recycling industries. Indirect
Collection of bins of recyclables from	Indirect effects could include both	many persons in society will adapt	(secondary and tertiary) effects
multi-family units	short and long-term changes in	easily to changes, others will not.	could occur. Magnitude, timing and
· Drop-off depot for multi-family	secondary and tertiary employment.	Mitigation is likely to occur as the	direction is uncertain. Long term
residents not serviced by recycling	Magnitude, timing and direction is	economy readjusts to 3Rs	employment gains in recycling
<ul> <li>Drop-off depot for rural households</li> </ul>	uncertain. As recycling becomes	management. There should be a	industries may be dependent on
<ul> <li>Community recycling centres</li> </ul>	more centralized the recycling	partnership between government,	capturing new markets with
· Engineered recycling depot	industries may become more	business and labour to facilitate this	expanded Blue Box items.
· Recycling at all multi-family buildings	specialized and centralized.	change in attitude. Education and	
of greater than 6 units	Employment opportunities may occur	re-training will be key components to	
<ul> <li>Blue Box recycling mandated</li> </ul>	only at one location in the GTA or	help the working population adapt to	•
	elsewhere in North America.	new and evolving sectors in the	
		"green" economy.	

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Leaf and Yard Waste Collection			
<ul> <li>Curbside collection of leaf and yard waste</li> <li>Drop-off depot for leaf and yard waste</li> </ul>	. No effect	· Mitigation not required	· No effect
Residential Household Composting			
Backyard composter distribution programs	Direct employment gains, primarily in low skill jobs, are likely in the		Direct employment gains, primarily in low skill jobs, are likely in the
Door to door distribution of backyard composters to 80% of single family	manufacturing of composters, and in the management of the program.	economy and employees. While many persons in society will adapt	manufacturing of composters, and in the management of the program.
households Promotion of vermicomposting to	Indirect effects could include both short and long term changes in	easily to these changes, many will not. Mitigation is likely to occur as	Indirect effects could include both short and long term changes in
multi-family units	secondary and tertiary employment.	the economy readjusts to 3Rs	secondary and tertiary employment.
Large 3-bin composing units distributed to apartment and	Magnitude, timing and direction of effects is uncertain.	management. There should be a partnership between government.	Magnitude, timing and direction of effects is uncertain.
cooperative housing complexes		business and labour to facilitate this	
	•	change in attitude. Education and	
		re-training will be key components to	
		help the working population adapt to	
		new and evolving sectors in the	
		"green" economy.	

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Other Residential Waste Diversion (HHW, Toxic Taxi, Pilot Wet-Dry, White Goods Collection, White Goods Dropof)			
Special curbside collections of Christmas trees Special and weekly curbside collections of white goods Drop-off depois for white goods Special curbside collection for bulky items Permanent drop-off depot for household hazardous waste (HHW) Special household hazardous waste drop-off days Toxic Taxi service Mobile IHHW depots	Minor direct employment effect in these programs. Indirect effects could include both short and long term changes in secondary and tertiary employment. Magnitude, timing and direction of effects is uncertain.	A transition to conserver attitudes has major implications for the economy and employees. While many persons in society will adapt easily to these changes, many will not. Mitigation is likely to occur as the economy readjusts to 3Rs management. There should be a partnership between government, business and labour to facilitate this change in attitude. Education and re-training will be key components to help the working population adapt to new and evolving sectors in the "green" economy.	Minor direct employment effect in these programs. Indirect effects could include both short and long term changes in secondary and tertiary employment. Magnitude, timing and direction of effects is uncertain.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities  Centralized windrow composting of leaf and yard waste In-vessel composting of source separated organics  Community composting	Direct employment, primarily in low skill jobs, at the composting facilities and in the management of the program. Indirect effects could include both short and long term changes in secondary and tertiary employment. Magnitude, timing, and direction of effects is uncertain. Minor short-term increase in construction sector employment.	A transition to conserver attitudes has major implications for the economy and employees. While many persons in society will adapt easily to these changes, many will not. Mitigation is likely to occur as the economy readjusts to 3Rs management. There should be a partnership between government, business and labour to facilitate this change in attitude. Education and re-training will be key components to help the working population adapt to new and evolving sectors in the	Direct employment, primarily in low skill jobs, at the composting facilities and in the management of the program. Indirect effects could include both short and long term changes in secondary and tertiary employment. Magnitude, timing, and direction of effects is uncertain.  Minor short-term increase in construction sector employment.
Douce Centres and Artivities		"green" economy.	
Municipal reuse centre Private reuse centre Non-profit reuse centre Charitable reuse centre Pood reuse organization Special goods exchange days	Direct employment gains, primarily in low skill jobs, are likely at these centres. Indirect effects could include both short and long term changes in secondary and tertiary employment. Magnitude, timing and direction of effects is uncertain.	Mitigation not required	Direct employment gains, primarily in low skill jobs, are likely at these centres. Indirect effects could include both short and long term changes in secondary and tertiary employment. Magnitude, timing and direction of effects is uncertain.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Public MRFs			
Processing centre for dry recyclables     Construct new MRF or     improve/expand existing MRF	Direct employment is likely to be maintained at the MRFs and in the management of the program. Indirect effects could include both short and long term changes in secondary and tertiary employment. Magnitude, timing and direction of effects is uncertain. Minor short-term increase in construction sector employment.	· Mitigation not required	
Residential Recycling Depots and Transfer Stations			
Drop-off depot for dry recyclables     Depots located at transfer stations	Direct employment gains, primarily in low skill jobs, are likely in haulage and in the management of the program. Indirect effects could include both short and long term changes in secondary and tertiary employment.  Minor short-term increase in construction sector employment.	Mitigation not required	Direct employment gains, primarily in low skill jobs, are likely in haulage and in the management of the program. Indirect effects could include both short and long term changes in secondary and tertiary employment.  Minor short-term increase in construction sector employment.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Promotion and Education			
Promotion/education program on Expanded Blue Box program     Promotion/education program on source reduction/ precycling/reuss/recycling     3Rs promotion and education program     Consumer education program	Direct employment gains are likely in printing, production and distribution. Indirect effects could include both short and long term changes in secondary and tertiary employment. Magnitude, timing and direction of effects is uncertain.	A transition to conserver attitudes has major implications for the economy and employees. While many persons in society will adapt easily to these changes, many will not. Mitigation is likely to occur as the economy readjusts to 3Rs management. There should be a partnership between government, business and labour to facilitate this change in attitude. Education and re-training will be key components to help the working population adapt to new and evolving sectors in the "green" economy.	Direct employment gains are likely in printing, production and distribution. Indirect effects could include both short and long term changes in secondary and tertiary employment. Magnitude, timing and direction of effects is uncertain.

# TABLE H4.7 GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY: GTA CRITERION: Potent

: GTA System : Residential Expanded Blue Box : Potential For Broad Social Impact Indicator: Potential Effects on Economic Development

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal			
Curbside collection of residential garbage from single family dwellings     Collection of residential garbage from multi-family units     Self haul of garbage     Regional recycling legislation	. No effect	· Mitigation not required	· No effect
Residential Recycling and Collection			
Curbside collection of Expanded Blue Box materials  Expanding curbside collection Collection of bins of recyclables from multi-family units Drop-off depot for multi-family residents not serviced by recycling Drop-off depot for rural households Community recycling centres Engineered recycling depot Recycling at all multi-family buildings of greater than 6 units Blue Box recycling mandated	Direct economic benefits are likely in recycling industries, and in recycling collection. Indirect economic effects could include both short and long-term changes in secondary and terriary sectors. Magnitude, tuming and direction is uncertain. Over the long-term, this initiative could lead to the development of marketable "green" systems, technologies, and products in the GTA (Mercer, 1993). Recycling in all multi-family buildings will increase the supply of recyclable material and lead to improved	The economic base is shifting from manufacturing to a more service orientation. Along with this trend is the movement towards a "green" economy. This transition is being made by various companies and sectors. However, the long-term competitiveness of the region may be dependent on the others making the transition as well. Government, business, and environmental interests should work in partnership to facilitate this transition (eg.	Direct economic benefits are likely in recycling rollection. Indirect economic effects could include both short and long-term changes in secondary and tertiary sectors. Over the long-term, this initiative could lead to the development of marketable "green" systems, technologies, and products in the GTA (Mercer, 1993). Mitigation will enhance benefits.  Recycling in all multi-family buildings will increase the supply of
	conomies of scale for recycling industries.	Environment), and grasp the opportunities for marketing "green" systems and technologies nationally and internationally.	recyclable material and lead to improved economies of scale for recycling industries.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Leaf and Yard Waste Collection			
Curbside collection of leaf and yard waste  Drop-off depot for leaf and yard waste	. No effect	· Mitigation not required	. No effect
Residential Household Composting			
Backyard composter distribution programs Door to door distribution of backyard composters to 80% of single family households Promotion of vermicomposting to multi-family units distributed to apartment and cooperative housing complexes	Minor direct economic benefits are likely in the manufacturing of composters, and in the management of the program. Indirect economic effects could include both short and long-term changes in secondary and tertiary sectors and cost savings from a reduction in landfill fees, due to reduced volumes. Magnitude, timing and direction of effects are uncertain. Over the long-term, this initiative could lead to the development of marketable "green" products in the GTA (Although the industries could locate elsewhere in North America).	The economic base is shifting from manufacturing to a more service orientation. Along with this trend is the movement towards a "green" economy. This transition is being made by various companies and sectors. However, the long-term competitiveness of the region may be dependent on the others making the transition as well. Government, business, and environmental interests should work in partnership to facilitate this transition (e.g. Roundtables on the Economy and Environment), and grasp the opportunities for marketing "green" systems and technologies nationally	Minor direct economic benefits are likely in the manufacturing of composters, and in the management of the program. Indirect economic effects could include both short and long-term changes in secondary and tertiary sectors and cost savings from a reduction in landfill fees, due to reduced volumes.  Magnitude, timing and direction of effects are uncertain.
		and internationally.	

Other Residential Waste Diversion (IIIIW, Toxic Taxi, Pilot Wet-Dry, White		Mitigation/Enhancement	
Goods Collection, White Goods Drop-off)			
Special curbside collections of likely Christmas trees Special and weekly curbside collections of white goods Of white goods Drop-off depots for white goods Special curbside collection for bulky a rediterm Permanent drop-off depot for reduce household hazardous waste (HHW) and drop-off days Toxic Taxi service Mobile HHW depots GTA	Minor direct economic benefits are likely in recycling industries, and in collection. Indirect economic effects could include both short and longterm changes in secondary and a reduction in landfill fees, due to reduced volumes. Magnitude, timing and direction of effects are uncertain. Over the long-term, this initiative could lead to the development of marketable "green" systems, rechnologies, and products in the GTA (Lesnicki and Mercer, 1993).	The economic base is shifting from manufacturing to a more service orientation. Along with this trend is the movement towards a "green" economy. This transition is being made by various companies and sectors. However, the long-term competitiveness of the region may be dependent on the others making the transition as well. Government, business, and environmental interests should work in partnership to facilitate this transition (eg. Roundtables on the Economy and Environment), and grasp the opportunities for marketing "green" systems and technologies nationally	Minor direct economic benefits are likely in recycling industries, and in collection. Indirect economic effects could include both short and long-term changes in secondury and tertiary sectors. Magnitude, timing and direction of effects are uncertain.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities			
Centralized windrow composing of leaf and yard waste     In-vessel composing of source	Minor direct economic benefits are likely for composting facilities. Indirect economic effects could	. The economic base is shifting from manufacturing to a more service orientation. Along with this trend is	Minor direct economic benefits are likely for composing facilities. Indirect economic effects could
separated organics Community composting	include both short and long-term changes in secondary and tertiary	the movement towards a "green" economy. This transition is being	include both short and long-term changes in secondary and tertiary
	sectors and cost savings from a reduction in landfill fees, due to	made by various companies and sectors. However, the long-term	sectors and cost savings from a reduction in landfill fees, due to
	reduced volumes. Magnitude, timing and direction of effects are uncertain.	competitiveness of the region may be dependent on the others making	reduced volumes. Magnitude, timing and direction of effects are
	Over the long-term, this initiative could lead to the development of	the transition as well. Government, business, and environmental	uncertain. Over the long-term, this initiative could lead to the
	marketable "green" systems,	interests should work in partnership	development of marketable "green"
	technologies, and products in the GTA (Lesnicki and Mercer, 1993).	to facilitate this transition (eg. Roundtables on the Economy and	systems, technologies, and products in the GTA (Lesnicki and Mercer,
		Environment), and grasp the	1993).
		opportunities for marketing green systems and technologies nationally and internationally.	
Reuse Centres and Activities			
· Municipal reuse centre	· Minor direct economic benefits are	· Mitigation not required	· Minor direct economic benefits are
· Private reuse centre	likely at these centres. Indirect		likely at these centres. Indirect
· Charitable reuse centres	short and long-term changes in		short and long-term changes in
· Food reuse organization	secondary and tertiary sectors.		secondary and tertiary sectors.
· Special goods exchange days	Magnitude, timing and direction of		Magnitude, timing and direction of
	decreased demand for new products.		chects are directions.
	Over the long-term, this initiative		
0	could lead to a viable purchasing		
	option for certain SES groups in the		
	GIA.		

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Public MRFs			
Processing centre for dry recyclables Construct new MRF or improve/expand existing MRF	Provides the infrastructural support for recycling materials by the private and public sector.     Provides a minor economic benefit in the construction sector.	manufacturing to a more service orientation. Along with this trend is the movement towards a "green" economy. This transition is being made by various companies and sectors. However, the long-term competitiveness of the region may be dependent on the others making the transition as well. Government, business, and environmental interests should work in partnership to facilitate this transition (eg. Roundtables on the Economy and Environment), and grasp the opportunities for marketing "green" systems and technologies nationally and internationally.	Indirect effect on economic development by providing the infrastructure required for recycling by the private and public sectors.  Direct minor positive short-term construction benefits.
Residential Recycling Depots and Transfer Stations			
Drop-off depot for dry recyclables Depots located at transfer stations	Provides the infrastructural support for recycling materials by the private and public sector.  Provides a minor economic benefit in the construction sector.	· Mitigation not required	Provides a minor short term economic benefit in the construction sector. Indirect effect on economic development by providing the infrastructure required for recycling by the private and public sectors.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Promotion and Education			
Promotion/education program on Expanded Blue Box program Promotion/education program on source reduction/ precycling/reuse/recycling 3Rs promotion and education program Consumer education program	Minor direct economic benefits in printing, production and distribution. Indirect economic effects could include both short and long-term changes in secondary and tertiary sectors. Magnitude, timing and direction of effects is uncertain.	· Mitigation not required	Minor direct economic benefits in printing, production and distribution. Indirect economic effects could include both short and long-term changes in secondary and tertiary sectors. Magnitude, timing and direction of effects is uncertain.

#### BSLOPE

## GENERIC COMPONENTS NET EFFECTS TABLE H4.8

MUNICIPALITY: GTA CRITERION: Potent

: GTA System : Residential Expanded Blue Box : Potential Impact Indicator: Potential For Broad Social Impact Indicator: Potential Operational Effects on Institutions, Commercial Enterprises and Industries

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal  Curbside collection of residential garbage from single family dwellings  Collection of residential garbage from multifamily units  Self haul of garbage  Regional recycling legislation	. No effect	· Mitigation not required	· No effect
Residential Recycling and Collection  Curbside collection of Expanded Blue Box materials Expanding curbside collection Collection of bins of recyclables from multi-family units Drop-off depot for multi-family residents not serviced by recycling Drop-off depot for rural households Community recycling Drop-off depot for rural households Facycling and multi-family buildings of greater than 6 units Blue Box recycling mandated	All landlords may be required to provide space, facilities and staff time to accommodate recycling and may incur additional costs.	Province to consider additional costs for recycling in annual rent review.	Potential increase costs for tenants and landlords.
Residential Leaf and Yard Waste Collection  Curbside collection of leaf and yard waste  Drop-off depot for leaf and yard waste	· No effect	· Mittgation not required	. No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting  Backyard composter distribution programs  Door to door distribution of backyard composters to 80% of single family households  Promotion of vermicomposting to multi-family units  Large 3-bin composting units distributed to apartment and cooperative housing complexes	Landlords may be required to provide space and equipment for compositers and may experience increased costs associated with insect and rodent control and staff, etc.	Province to consider increase in costs associated with composting services in annual rent review applications.	Potential increase in costs for tenants and landlords.
Other Residential Waste Diversion (HHW, Toxic Taxi, Pilot Wet-Dry, White Goods Collection, White Goods Drop-off)			
Special curbside collections of Christmas trees Special and weekly curbside collections of white goods Drop-off depots for white goods Special curbside collection for bulky items Permanent drop-off depot for household hazardous waste (HHW) Special household hazardous waste drop-off days Toxic Taxi service Mobile HHW depots	The efficiency (or ease) of white goods disposal may have an effect on the sale of white goods (customers may want vendors to take back their old products).  Because of the increasing inconvenience to consumers in disposing of old appliances/furniture, etc., they may start looking for, and there may be a growing market for, products which are smaller and more durable.	Retail stores could develop buyback programs for large and bulky items. The consumer would then not be required to disperse items.	In the long term institutions and commercial enterprises may develop programs to "buy back" used white goods.
Composting Facilities			
Centralized windrow composting of leaf and yard waste     In-vessel composting of source separated organics     Community composting	. No effect	Mitigation not required	· No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Reuse Centres and Activities  Municipal range contro	. No officer	. Mititation not required	. No effect
Mulicipal reuse centre     Non-profe reuse centre     Non-profit reuse centre			
· Charitable reuse centres			
Food reuse organization     Special goods exchange days			
Public MRFs			÷
Processing centre for dry recyclables     Construct new MRF or improve/expand existing     MRF	· No effect	· Mitigation not required	. No effect
Residential Recycling Depots and Transfer Stations			
Drop-off depot for dry recyclables     Depots located at transfer stations	. No effect	· Mugation not required	. No effect
Residential Promotion and Education			
Promotion/education program on Expanded Blue Box program Demotion/education program	No effect	Mitigation not required	. No effect
reduction) pro-gram on source reduction program  3Rs promotion and education program  Consumer education program			



### DCB.SEE

# TABLE H4.9 GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY: GTA

System: Residential Expanded Blue Box

CRITERION : Distribution of Social Costs and Benefits

Indicator: Distribution of Socio-Economic Effects on Industry and Population Groups

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal  Curbside collection of residential garbage from single family dwellings  Collection of residential garbage from multi-family units Self haul of garbage Regional recycling legislation	· No effect	· Mitigation not required	· No effect
Residential Recycling and Collection  Curbside collection of Expanded Blue Box materials  Expanding curbside collection  Collection of bus of recyclables from multi-family units  Drop-off depot for multi-family residents not serviced by recycling.  Drop-off depot for rural households  Community recycling centres  Engineered recycling depot  Recycling at all multi-family buildings of greater than 6 units  Blue Box recycling mandated	· No effect	· Mitigation not required	. No effect
Residential Leaf and Yard Waste Collection  Curbside collection of leaf and yard waste  Drop-off depot for leaf and yard waste	· No effect	· Minigation not required	. No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting  Backyard composter distribution programs  Door to door distribution of backyard composters to 80% of single family households  Promotion of vermicomposting to multifamily units  Large 3-bin composting units distributed to apartment and cooperative housing complexes	· No effect	· Mitigation not required	· No effect
Other Residential Waste Diversion (HIIW, Toxic Taxi, Pilot Wet-Dry, White Goods Collection, White Goods Drop-off  Special curbside collections of Christmas trees Special and weekly curbside collections of white goods  Drop-off depots for white goods  Special curbside collection for bulky items  Permanent drop-off depot for household hazardous waste (HHW)  Special household hazardous waste dropoff days  Toxic Taxi service  Mobile HHW depots	Residents of some municipalities are provided with white goods and HHW collection, while others are not.	Mitigation not required	Minor effect in different level of service for white goods and HHW collection in some municipalities.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities			
Centralized windrow composting of leaf and yard waste	Local residents and businesses may receive nuisance effects related to	Site the composting facility in a non- residential area and away from	Negative distribution effect on some local communities,
In-vessel composting of source separated organics	composting for all region residents.	sensitive industry and committee uses.  Develop appropriate mitigation/ compensation for site related impacts.	population groups and industries.
Supporting confloating .		Address equity issue aspect of the siting process	
Reuse Centres and Activities			
Municipal reuse centre     Private reuse centre	Positive effect for lower income groups as more low cost items	Mitigation not required	Positive effect for lower income groups as more low cost items
· Non-profit reuse centre	available and adds potential market		available and adds potential market for their goods.
Charitative Tease Centres     Food reuse organization     Social goods exchange days	ion their Boxes.		
Public MRFs			
. Decreesing contro for decreecing	· Poventist negative distribution	Mineration as "Potential Effects on	Potential negative distribution
Construct new MRF or improve/expand existing MRF	effects on some facilities	Residents"	effects on some facilities.
Residential Recycling Depots and Transfer			
Stations			
Drop-off depot for dry recyclables     Depois located at transfer stations	Potential negative distribution effects on some facilities.	Mitigation as "Potential Effects on Residents"	Potential negative distribution effects on some facilities.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Promotion and Education			
Promotion/education program on Expanded Blue Box program Promotion/education program on source reduction/ pre-cycling/reuse/recycling/ 3Rs promotion and education program	. No effect	Mitigation not required	. No effect

# TABLE H4.10 GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY: GTA CRITERION: Distrib

Y: GTASystem:Distribution of Social Costs and Benefits Indicator:

System: Residential Expanded Blue Box Indicator: Distribution of Lifestyle Effects

Component Category/ Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal			
Curbside collection of residential garbage from single family dwellings     Collection of residential garbage from multi-family units     Self haul of garbage     Regional recycling legislation	· No effect	· Mitigation not required	. No effect
Residential Recycling and Collection			
Curbside collection of Expanded Blue Box materials Expanding curbside collection Collection of bins of recyclables from multi-family units Drop-off depot for multi-family residents not serviced by recycling Drop-off depot for rural households Community recycling centres Engineered recycling depot Recycling at all multi-family buildings of greater than 6 units Blue Box recycling mandated	Potential positive effect by increasing opportunity for multi-family dwelling residents to participate (Hay, ND; Environics, 1992).	. Mitigation not required	Potential positive effect by increasing opportunity for multifamily dwelling residents to participate (Hay, ND; Environies, 1992).

Component Category/ Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Leaf and Yard Waste Collection  • Curbside collection of leaf and yard waste  • Drop-off depot for leaf and yard waste	Residents of local municipalities without curbside collection may be required to make a greater change to lifestyle to reduce waste by either taking their leaf and yard waste to a facility or composting it at their residence.	· Mitigation not required	Residents of local municipalities without curbside collection may be required to make a greater change to lifestyle to reduce waste by either taking their leaf and yard waste to a facility or composting it at their residence.
Residential Household Composting  Backyard composter distribution programs  Door to door distribution of backyard composters to 80% of single family households  Promotion of vermicomposting to multi-family units distributed to apartment and cooperative housing complexes	Equitable distribution of services.	· Miligation not required	Equitable distribution of services

Component Category/ Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Other Residential Waste Diversion (IIIIW, Toxic Taxi, Pilot Wet-Dry, White Goods Collection, White Goods Dropodf)  Special curbside collections of Christmas trees Special and weekly curbside collections of white goods Drop-off depots for white goods Drop-off depots for white goods Special curbside collection for bulky items Permanent drop-off depot for household hazardous waste (IIIIW) Special household hazardous waste	No effect	Mittgatton not required	No effect
drop-off days Toxic Taxi service Mobile HHW depots			
Composting Facilities			
Centralized windrow composting of leaf and yard waste     In-vessel composting of source separated organics     Community composting	· No effect	Mitigation not required	. No effect
Reuse Centres and Activities			
Municipal reuse centre     Private reuse centre     Non-profit reuse centre     Charitable reuse centres	. No effect	Mitigation not required	No effect
· Food reuse organization · Special goods exchange days			

Component Category/ Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Public MRFs			
Processing centre for dry recyclables     Construct new MRF or     improve/expand existing MRF	· No effect	· Mitigation not required	. No effect
Residential Recycling Depots and Transfer Stations			
Drop-off depot for dry recyclables     Depots located at transfer stations	· No effect	Mitigation not required	· No effect
Residential Promotion and Education			
Promotion/education program on Expanded Blue Box program	. No effect	· Mitigation not required	· No effect
source reduction/ pre-			
cycling/reuse/recycling  3Rs promotion and education			
program Consumer education program			

## TABLE H4.11 GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY: GTA
CRITTERION: Distribution of

System : Residential Expanded Blue Box Indicator: Potential Future Generation Effects of System

: Distribution of Social Costs and Benefits Indicator: Potential

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal			
Curbside collection of residential garbage from single family dwellings     Collection of residential garbage from	· No effect	· Muigation not required	. No effect
multi-family units Self haul of garbage Regional recycling legislation			
Residential Recycling and Collection			
Curbside collection of Expanded Blue Box materials Expanding curbside collection Collection of bins of recyclables from multi-family units Drop-off depot for multi-family residents not serviced by recycling Community recycling centres Community recycling centres Fingineered recycling depot Recycling at all multi-family buildings of greater than 6 units	Potential positive effect through more sustainable use of resources and conservation of the environment for recycling.	Continue to promote and educate on 3Rs (Hay, ND); Lesmek, 1993; Morgan-Frasci, 1993; Watson, 1993; Morgan-Frasci, 1993; Watson, 1993).  The likely over-all benefit to future generations needs to be emphasized in promoting these programs. It needs to be stressed that the current generation is willing to make some sacrifices to ensure the future prosperity of their children/grandchildren.	Positive effect through more sustainable use of resources and conservation of the entronment for future usclenjoyment.     Potential positive effect through more sustainable use of resources and conservation of the environment for recycling.
· Blue Box recycling mandated			

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Leaf and Yard Waste Collection			
<ul> <li>Curbside collection of leaf and yard waste</li> <li>Drop-off depot for leaf and yard waste</li> </ul>	Coxily to start-up and establish but may have environmental benefits in the long run. May be better to have the yard waste composted at the household (e.g., mulch leaves and grass branches) (Lesnicki, 1993).	Evaluate the best approach to management of leaf and yard waste. Address residential on- site mulching, chipping and composting. Could reduce the need for collection costs and costs for large, centralized facilities in the long term and may pass on the future generation a better process, so less facility management/decommissioning cost.	. Uncertain of the long term effect
Residential Household Composting  Backyard composter distribution programs  Door to door distribution of backyard composters to 80% of single family households  Promotion of vermicomposting to multifamily units  Large 3-bin composting units distributed to apartment and cooperative housing complexes	Moderately costly to start-up and establish but environmentally beneficial in the long run. Should support change in behaviour to reduction and reuse.	Promotion and education should increase future participation rates (Environics, 1990).	Positive effect of passing on a healthier environment with resources more available through support for change in behaviour to reduction and reuse.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Other Residential Waste Diversion (IIIIW, Toxic Taxi, Pilot Wet-Dry, White Goods Collection, White Goods Drop-off)  Special curbside collections of Christmas trees  Special and weekly curbside collections of white goods  Drop-off depots for white goods  Special curbside collection for bulky items  Permanent drop-off depot for household hazardous waste (IIIIW)  Special household hazardous waste dropoff days  Toxic Taxi service  Mobile IIIIW depots	<ul> <li>Positive effect of providing a cleaner environment for the future through support for change in behaviour to repair, reuse and proper disposal.</li> </ul>	. Mitigation not required	Positive effect of providing a cleaner environment for the future through support for change in behaviour to repair, reuse and proper disposal.
Composting Facilities  Centralized windrow composting of leaf and yard waste In-vessel composting of source separated organics Community composting	Costly to start-up and establish but environmentally and possibly economically beneficial in the long run.	Fivaluate the best approach to management of leaf and yard waste. Address residential on- site mulching, chipping and composting. Could reduce the need for collection costs and costs for large, centralized facilities in the long term.	Minor positive future generational effect.
Reuse Centres and Activities  Municipal reuse centre  Private reuse centre  Non-profit reuse centre  Charitable reuse centres  Food reuse organization  Special goods exchange days	Should encourage/support repair and reuse of white goods etc., reduce the use of resources for manufacture of new products, leaving natural resources for the future.	Province to consider the removal of the Provincial Sales Tax or other provincial taxes for the sale of used goods.	Positive effect through the support for repaired reuse of good, and subsequent reduction of resource use.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Public MRFs			
Processing centre for dry recyclables Construct new MRF or improve/expand existing MRF	<ul> <li>Costly to start-up and establish because of market development, but environmentally and possibly economically beneficial in the long run.</li> </ul>	· Mitigation not required	Positive effect as the current generation is paying the cost for changing to more sustainable behaviour, which should leave future generations with cleaner
	Current generation paying the cost for altering behaviour to a more sustainable society. Required support for recycling.		environment and more resources available.
Residential Recycling Depots and Transfer Stations			
Drop-off depot for dry recyclables  Depots located at transfer stations	Costly to start-up but environmentally and possibly economically beneficial in the long run.     Current generation behaviour paying cost for altering behaviour to a more sustainable society.	· Mitigation not required	Positive effect as the current generation is paying the cost for changing to more sustainable behaviour which should leave future generations with cleaner environment and more resources available.
Residential Promotion and Education			
Promotion/education program on Expanded Blue Box program Promotion/education program on source reduction/ pre-cycling/reuse/recycling 3Rs promotion and education program Consumer education program	Should have positive effects in changing current attitudes and behaviours to a more sustainable society which should leave future generations with cleaner environment and more resources available.	<ul> <li>Education material could emphasize the benefits to future generation of 3Rs actions today.</li> </ul>	Positive effects in changing current attitudes and behaviour to a more sustainable society which should leave future generations with cleaner environment and more resources available.

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## GENERIC COMPONENTS NET EFFECTS TABLE H5.1

MUNICIPALITY: GTA CRITERION: Potent

: Potential Local Community Impacts

System: Residential Wet/Dry Indicator: Potential Effects on Residents

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal  Curbside Collection of residential garbage from single family dwellings in three streams  Collection of residential garbage from multi-family units in three streams  Self haul of garbage  Regional recycling legislation	Effects uncertain with recycling legislation     Other components, no effect	• Mitigation noi required	Effects uncertain with recycling legislation     Other components, no effect
Residential Recycling and Collection  Provide carts to all single family households Separation of waste into three streams Drop-off depot for multi- family residents not serviced by recycling Drop-off depot for rural households	No effect	· Mitigation not required	. No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Leaf and Yard Waste Collection			
Seasonal separate collection of leaf and yard waste Drop-off depot for leaf and yard waste	· No effect	Mitigation not required	· No effect
Residential Household Composting			
Door-to-door distribution of backyard composters to 80% of single family households	· No effect	Mitigation not required	· No effect
· Large 3-bin composting units distributed to apartment and co-operative housing			
complexes  Vermi-composting for multi-family households			

Component Category/Components	Potential Effects	Mitigation/F.nhancement	Component Net Effects
Other Residential Waste Diversion (HHW, Toxic Taxi, Pitot Wet/Dry, White Goods Collection, White Goods Drop- Off, etc.)			
Special curbside collections of Christmas trees Special and weekly curbside collections of white goxds Drop-off depots for white goxds Special curbside collection for bulky items Permanent drop-off depot for IIIIW Special IIIW drop-off days Toxic Taxis service Mobile IIIW depots	. No effect	· Mitigation not required	. No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities			
· Central composting facilities	Potential nuisance effects:	· Composting sites will need to be	· Potential nuisance effects
(in-vessel or windrow) for	- odour	ocated in areas of companies for	residents from the location of
composting of source	- scavenging animais and oirds	these types of facilities should	va new facility
(wet stream)	- illegal dumping	address: odour, heavy truck traffic,	· Potential for odour effects
· Centralized windrow	- traffic, truck queuing	truck queuing, nuisance and litter.	health and safety concerns and
composting of leaf and yard	- noise	State-of-the-art odour control	minor nuisance effects such as
waste	- child safety	features should be design	traffic, litter, visual, birds,
	- property devaluation	requirements along with proper	vermin and noise. These
	- stigma for neighbourhood	management of the material and	effects may be more extensive
	· Health Concerns	initiatives to reduce the possibility of	in wet/dry than in leaf and
	Odour effects from composting facilities that	vectors and vermin. Local residents	yard waste composting.
	receive mixed IC&I compost have been significant	should be on the	
	enough to have facilities closed down (RIS, 1993;	management/monitoring committees	
	J. Scott, 1993; Lannon, 1993). Odour effects from	(Lesnicki, 1993).	
	the wet stream of a Wet/Dry system in the		
	province are relatively unknown. The Guelph		
	Pilot Wet/Dry Project was of too small a scale to		
	comparatively evaluate.		
	As management of the facility should comply with		
	all operational requirements, the requirements		
	should be reviewed frequently due to the limited		
	experience in composting on a large scale with a		-
	wet/dry system.		
	<ul> <li>Wet/Dry systems can be highly contaminated</li> </ul>		
	unless a significant percentage of the population,		
	very diligently source separates the waste. If there		
	is very high contamination, it may lead to		
	increased odour problems and the possibility of		
	health concerns such as increased levels of		
	pathogens and bacteria (e.g. diapers been tossed in		
	with the wet stream).		

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities (continued)			
Central composting facilities (in-vessel or windrow) for composting of source separated household organic (wet stream) Centralized windrow composting of leaf and yard waste	Research does not indicate an association between occupational health problems and composting because dose-response issues are not resolved. (Maritato et al., 1992). However, health effects could be monitored for workers and the neighbouring residents over an initial period at the required facility (Taylor, 1993).  Possible displacement of residents from the location of a new facility.		
Reuse Centres and Activities  Municipal reuse centre  Private reuse centre  Non-profit reuse centre  Charitable reuse centre  Tood reuse organization  Special goods exchange days	<ul> <li>traffic concerns</li> <li>visual effect of large bins in plazas</li> <li>centres may not be desirable in all areas due to stigma</li> </ul>	Locate Reuse Centres in areas of compatible land use	· No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Public MRFs			
· New MRF or improve/ expand existing MRF's to	Potential nuisance effects: - litter	Mitigation will need to encompass proper siting and management Siting MRP's should be sited in	<ul> <li>Possible displacement of residents from the siting of a · new facility</li> </ul>
recyclables	traffic, truck queuing	areas of compatible land use. The	Potential for odour effects,
	- noise - child safety	siting considerations for these types of facilities will need to address:	health and safety concerns, and minor nuisance effects.
	- property devaluation	heavy truck traffic, noise, visibility,	These effects may be more
	- illegal dumping at centre	truck queuing, litter, odour, and the	extensive in a wet/dry system
	- odour (due to possibility of contamination of the	possibility of excess storage	than with other facilities,
	dry stream)	(Lesnicki, 1993).	because of potential for
	Description of the discrete of the second control of the second of the s	Management: The facility will need	contamination.
	rossiole displacement of residents from the stung of a new facility	control dust litter odour rodents	
		and other pest, and excess materials.	
		Many of these effects could	
		potentially be controlled by proper	
		site design and planning (berms,	
		fences, etc.).	
		<ul> <li>Mitigation measures will need to be</li> </ul>	
		developed on a system-wide basis	
		for the management of excess	
	•	materials as a result of over-supply	
		of some material markets. While	
		these materials may not be kept at	
		the MRFs, storage will be required	
		elsewhere.	
		<ul> <li>Local residents should be on a</li> </ul>	
		monitoring/management committee	

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations			
Drop-off depot for dry recyclables  Depots located at transfer stations/landfills	Potential nuisance effects:  Inter  visual  traffic, truck queuing  noise  child safety  property devaluation  illegal dumping at centre  odour (due to possibility of contamination of the dry stream)  Possible displacement of residents from the siting of a new facility	Mitigation will need to encompass proper sting and management. Sting: Depots and transfer stations should be sited in areas of compatible land use: These facilities are expected to be significantly smaller in scale than Public MRI's. The sting considerations for these types of facilities will need to address: truck traffic, possibility of truck queung, noise, litter, odour and the possibility of excess storage. Facility management will need to control nuisance effects and excess materials. Many of these effects could be controlled by proper site design and planning (berms, fences, etc.).  Mitigation measures will need to be developed on a system-wide basis for the management of excess materials as a result of over-supply of some material may not be kept at the depois/transfer stations, storage will be required clsewhere.  Odour effects can best be controlled by ensuring a low contamination rate.	Porential minor nuisance effects at some facilities Possible displacement of residents from the string of a new facility

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Promotion and Education			
	. No effect	Mitigation not required	No effect
Colisariaci concatton program			

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### GENERIC COMPONENTS NET EFFECTS TABLE H5.2

MUNICIPALITY: GTA

: Potential Local Community Impacts CRITERION

System: Residential Wet/Dry Indicator: Potential Effects on special/sensitive groups

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal			
Curbside Collection of residential garbage from single family dwellings in three streams     Collection of residential garbage from multi-family units in three streams     Setf haul of garbage     Self haul of garbage	Wet/Dry collection may seriously effect elderly and disabled populations (mobility impaired) who must move 90 gallon carts in all seasons. Winter may be very problematic due to snow on curbs. They also may have problems cleaning the carts, and with nuisance effects (odour, vermin, etc.) (City of Guelph, 1991).	Mitigation may need to include alternative collection units for these groups	Wet/Dry System may be very difficult for elderly and disabled groups
Residential Recycling and Collection			
Provide carts to all single family households     Separation of waste into three streams     Drop-off depot for multi-family residents not serviced by recycling     Drop-off depot for rural households	Wet/Dry collection may seriously effect elderly and disabled populations (mobility impaired) who must move 90 gallon carts in all seasons. Winter may be very problematic due to snow on curbs. They also may have problems cleaning the carts, and with nuisance effects (oxdour, vermin, etc.) (City of Guelph, 1991).	Mitigation may need to include afternative collection units for these groups	Wet/Dry System may be very difficult for elderly and disabled groups
Residential Leaf and Yard Waste Collection			
Seasonal separate collection of leaf and yard waste     Drop-off depot for leaf and yard waste	. No effect	. Mitigation not required	· No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting  · Door-to-door distribution of backyard composters to 80% of single family households · Large 3-hin composting units distributed to apartment and cooperative housing complexes · Vermi-composting for multi-family households	Odour from backyard composters affects owners and/or neighbours     Lower participation from the clderlyphysically demanding for some	Make information available on maintaining household composters to assist in reducing odour	Nuisance effect associated with odour and physical strain on elderly
Other Residential Waste Diversion (IHIW, Toxic Taxi, Pitot Wet(Dry, White Goods Collection, White Goods Drop-Off, etc.)  Special curbside collections of Christmas trees Special and weekly curbside collections of white goods Drop-off depots for white goods Drop-off depots for white goods Special curbside collection for bulky items Permanent drop-off depot for HHW Special HHW drop-off days Toxic Taxi service Mobile HHW depots	Possible occupational safety concerns with drivers and handlers of HHW	• HHW education for drivers and handlers	Minor possible occupational safety concerns with drivers and handlers of HHW

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities			
Central composting facilities (in-	· Although the research (Curtis et al.,	· Since the destruction of pathogens in	· Employees at MRFs and in
vessel or windrow) for composting	1991) indicates that properly managed	compost is directly proportional to	particular compost facilities may
of source separated household	composting produces a safe product,	the temperature increases achieved in	be subjected to a variety of health
organic (wet stream)	there are: Possible health effects on	the piles (Curtis et al., 1991),	and safety hazards such as HIIW
Centralized windrow composting of	allergy sufferers, people with respiratory	appropriate operational procedures	and sharps in "wet" stream.
leaf and yard waste	ailments, people with immuno-	should be instituted to maximize this	Hazards should be minimized by
	deficiencies; possible employee health	destruction.	consultation and education and
	concerns (Taylor, 1993).	<ul> <li>Prudence dietates that employees</li> </ul>	mitigated by proper design and
	<ul> <li>Possible negative health effects may be</li> </ul>	should practise proper hygiene and	control.
	heightened because of the potential for	wear protective clothing	· · Potential for health effects
	contamination of the "Wet" stream by	<ul> <li>Health effects monitoring for</li> </ul>	(odours) or allergy sufferers,
	other materials. Household hazardous	employees and high-risk residents	people with immuno-deficiencies,
	wastes and sharps (razors, needles, ete.)	should be an operational condition	etc. from composting facilities.
	may be significant concerns (Taylor,	<ul> <li>Periodic monitoring of the piles to</li> </ul>	
	1993). The actual effects are relatively	determine type and extent of	
	unknown due to limited North American	contamination	
	experience with wet/dry systems.		
Reuse Centres and Activities			
· Municipal reuse centre	· Food contamination issue and liability	Train food distribution groups in	· No effect
· Private reuse centre	concerns of donors (Wrigley, 1993).	potential contamination/spoilage	
<ul> <li>Non-profit reuse centre</li> </ul>	· Positive effect for low-income and	Enact "Good Samaritan" Legislation	
· Charitable reuse centres	disabled groups	to absolve donor of responsibility-	
· Food reuse organization	· Possible transfer of pests in reuse	<ul> <li>Cleaning and fumigation of materials.</li> </ul>	
<ul> <li>Spēcial goods exchange days</li> </ul>	centres, exchange days, etc.		

Commonent Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Public MRFs  New MRF or improve/expand existing MRF's to process larger	Possible employee health/safety concerns due to contamination of the "dry" stream	Educate/train employees on health     and safety hazards and precautions.     Ashional low contemination rates of	Magnitude of health and safety effects will be dependent on the contamination level of the "dry"
dry stream of recyclable	with bazardous materials (sharps, 1111 w, etc.) (Taylor, 1993).	Acticans.	stream and appropriate clothing and management for the employees.
Residential Recycling Depots and Transfer Stations			
<ul> <li>Drop-off depot for dry recyclable</li> <li>Depots located at transfer stations/landfills</li> </ul>	<ul> <li>Possible employee health/safety concerns due to contamination of the "dry" stream with hazardous materials (sharps, HHW,</li> </ul>	<ul> <li>Educate/train employees on health and safety hazards and precautions.</li> <li>Achieve low contamination rates of</li> </ul>	Magnitude of health and safety effects will be dependent on the contamination level of the "dry"
	etc.) (Taylor, 1993).	streams.	stream and appropriate clothing and management for the employees
Residential Promotion and Education			
Promotion/education program for wet/dry system	· No effect	· Mitigation not required	· No effect
Promotion/education program for source reduction/pre-cycling, reuse			
and recycling 3Rs promotion and education			
program Consumer education program	Э		

# TABLE H5.3 GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY: GTA

CRITERION

: OTA : Potential Local Community Impacts

System: Residential Wet/Dry Indicator: Potential Effects on Communities

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal  Curbside Collection of residential garbage from single family dwellings in three streams  Collection of residential garbage from multi-family units in three streams  Self hau to garbage  Regional recycling legislation	<ul> <li>Traffic inconveniences are possible due to the wet/dry collection system, and increase in materials being transported.</li> </ul>	· Mitigation not required	Traffe inconveniences are possible due to the wet/dry collection system, and increase in materials being transported.
Residential Recycling and Collection  Provide carts to all single family households Separation of waste into three streams Drop-off depot for multi-family residents not serviced by recycling	Potential minor traffic inconvenience in communities when materials are deposited in the truck.     Potential for increase in community pride.	- Mitigation not required	Potential minor traffic inconvenience in communities when materials are deposited in the truck.     Potential for increase in
Residential Leaf and Yard Waste Collection Seasonal separate collection of leaf and yard waste Drop-off depot for leaf and yard waste	. No effect	· Mitigation not required	community pride.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting			
Door-to-door distribution of backyard composters to 80% of single family. households Large 3-bin composting units distributed to apartment and co-operative housing complexes Vermi-composting for multi-family households	· No effect	Mitigation not required	. No offeet
Other Residential Waste Diversion (IHIW, Toxic Taxi, Pilot Wet/Dry, White Goods Collection, White Goods Drop-Off, etc.)	·		
Special curbside collections of Christmas trees     Special and weekly curbside collections of white goods     Drop-off depois for white goods     Special curbside collection for bulky items     Permanent drop-off depot for HHW     Special HHW drop-off days     Toxic Taxi service     Mobile HHW depois	Failure of programs tend to have a negative effect on community image. For example, couches, mattresses in vacant lots.	Develop incentives for people to donate useful large items, repair/reuse items or properly dispose of them. Assistance in organization of community garage sales, flea markets, etc.  Enforcement for illegal dumping.	Minor negative stigma effect on community image from illegal dumping.
Composting Facilities			
Central composting facilities (in-vessel or windrow) for composting of source separated household organic (wet stream)     Centralized windrow composting of leaf and yard waste	Possible stigma effect in some communities	State-of-the-art odour control should be an operational condition.	Possible stigma effect in some communities. Magnitude of effect dependent on site     location and management of the facility.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Reuse Centres and Activities			
Municipal reuse centre     Private reuse centre	· Possible stigma effect in some communities	· Location of the reuse centres in suitable land use area.	· No effect
Non-profit reuse centre Charitable reuse centres			
Food reuse organization			
special goods excitating days			
Public MRFs			
New MRF or improve/expand existing MRFs to process larger day stream of	· Possible stigma effect in some	· Mitigation not required	Possible stigma effect in some
recyclable	communics.		communities.
Residential Recycling Depots and Transfer			
Stations			
Drop-off depot for dry recyclable	. No effect	· Mitigation not required	· No effect
· Depots located at transfer stations			
Residential Promotion and Education			
Promotion/education program for wet/dry system	· Possible increase in community pride.	· Mitigation not required	· Possible increase in community
Promotion/education program for source			pinc.
reduction/pre-cycling, reuse and recycling		·	
Consumer education program			



### GENERIC COMPONENTS NET EFFECTS TABLE H5.4

MUNICIPALITY: GTA CRITERION

: Potential Local Community Impacts

System : Residential Wet/Dry Indicator: Potential Effects on Community Features and Businesses

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal  Curbside Collection of residential garbage from single family dwellings in three streams  Collection of residential garbage from multi-family units in three streams  Streams  Steams  Repinal recycling legislation	· No effect	- Mitigation not required	. No effect
Residential Recycling and Collection  Provide carts to all single family households  Separation of waste into three streams  Drop-off depot for multi-family residents not serviced by recycling households	· No effect	Mitigation not required	· No effect
Residential Leaf and Yard Waste Collection  Seasonal separate collection of leaf and yard waste	· No effect	. Mitigation not required	. No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting  Door-to-door distribution of backyard composters to 80% of single family households  Large 3-bin composting units distributed to apartment and co-operative housing complexes  Vermi-composting for multi-family households	· No effect	· Mittgation not required.	. No effect
Other Residential Waste Diversion (IIIW, Toxic Taxi, Pilot Wet/Dry, White Goods Collection, White Goods Drop-Off, etc.)  Special curbside collections of Chrismas trees Special and weekly curbside collections of white goods Drop-off depots for white goods Drop-off depots for white goods Permanent drop-off depot for HHW HW Special HHW drop-off days Toxic Taxi service Mobile HHW depots	. No effect	Mitigation not required	. No effect

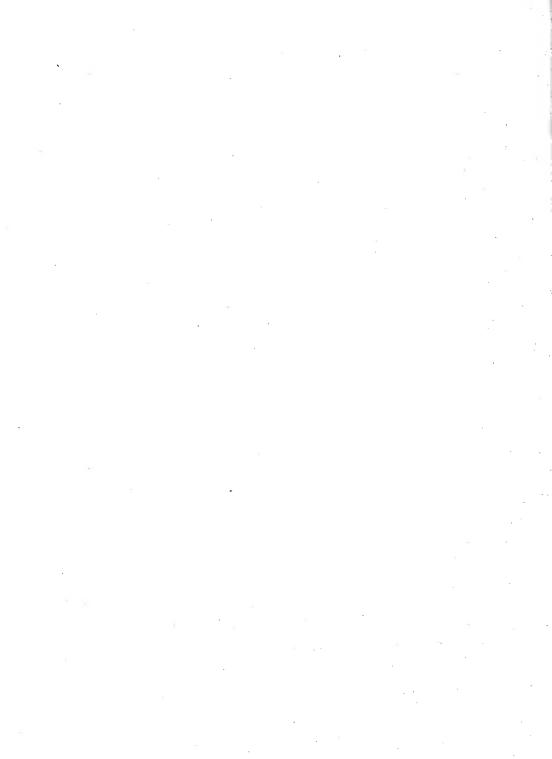
Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities			
· Central composting facilities (in-	· Potential nuisance effects:	· Composting sites will need to be	Potential nuisance effects
vessel or windrow) for composting	- odour	located in areas of compatible land	· Possible displacement of
of source separated household	<ul> <li>scavenging animals and birds</li> </ul>	use. The siting considerations for	community features and business
organic (wet stream)	- visual	these types of facilities should	from the location of a new facility
Centralized windrow composting of	- illegal dumping	address: odour, heavy truck traffic,	· Potential for odour effects health
leaf and yard waste	- traffic, truck queuing	truck queuing, nuisance and litter.	and safety concerns and minor
	- noise	State-of-the-art odour control features	nuisance effects such as traffic,
	- child safety	should be design requirements along	litter, visual, birds, vermin and
	- property devaluation	with proper management of the	noise. These effects may be more
	<ul> <li>stigma for neighbourhood</li> </ul>	material and initiatives to reduce the	extensive in wet/dry than in leaf
	· Health Concerns	possibility of vectors and vermin.	and yard waste composting.
	Odour effects from composting facilities	People at community features and	
	that receive mixed IC&I compost have	business should be on the	
	been significant enough to have facilities	management/monitoring committees	
	closed down (RIS, 1993; J. Scott, 1993;	(Lesnicki, 1993).	,
	Lannon, 1993). Odour effects from the		
	wet stream of a Wet/Dry system in the		
	province are relatively unknown. The		
	Guelph Pilot Wet/Dry Project was of too		
	small a scale to comparatively evaluate.		
	As management of the facility should		
	comply with all operational		-
	requirements, the requirements should		
	be reviewed frequently due to the		
	limited experience in composting on a		
	large scale with a wet/dry system.		

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities (continued)  Central composting facilities (invessel or windrow) for composting of source separated household organic (wet stream)  Centralized windrow composting of leaf and yard waste	Research does not indicate an association between occupational health problems and composting because doseresponse issues are not resolved.  (Maritato et al., 1992). However, health effects could be monitored for workers and the neighbouring community features and businesses over an initial period at the required facility (Taylor, 1993).  Wet/Dry systems can be highly contaminated unless a significant percentage of the population, very diligently source separates the waste. If there is very high contamination, it may lead to increased dour problems and the possibility of health concerns such as increased levels of pathogens and bacteria (e.g. diapers been tossed in with the west stream).  Possible displacement of community features and businesses from the location of a new facility.		
Reuse Centres and Activities  Municipal reuse centre Private reuse centre Non-profit reuse centre Charitable reuse centres Food reuse organization Special goods exchange days	Minor nuisance related effects on neighbouring features and businesses  Visual blight/image effect.	· Mitigation not required	. No effect

Public MRFs	Potential Effects	Mitigation/Enhancement	Component Net Effects
New MRF or improve/expand existing MRF's to process larger dry stream of recyclable	Potential nusance effects:  - litter  - visual  - traffic, fruck queuing  - noise  - noise  - noise  - noise  - noise  - odour (due to possibility of  contamination of the dry stream)  Possible displacement of community  features and businesses from the siting  of a new facility	Mitigation will need to encompass proper siting and management Siting: MRF's should be sited in areas of compatible land use. The siting considerations for these types of facilities will need to address: heavy truck traffic, noise, visibility, truck queuing, litter, odour, and the possibility of excess storage (Lesnicki, 1993).  Management: The facility will need to be managed in such a way as to control dust, litter, odour, rodents and other pest, and excess materials. Many of these effects could potentially be controlled by proper site design and planning (berms, fences, etc.).  Mitigation measures will need to be developed on a system-wide basis for the management of excess materials as a result of over-supply of some material markets. While these material markets. While these material markets and elsewhere.  People at Community features and businesses should be on a	Possible displacement of community features and businesses from the siting of a new facility. Potential for odour effects, health and safety concerns, and minor nuisance effects. These effects may be more extensive in a wet/dry system than with other facilities, because of potential for contamination.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations		. Mitigation will need to encompass	. Minor missance effects at some
Drop-off depot for dry recyclable Depots located at transfer	<ul> <li>Nuisance related effects on nearby features and businesses;</li> </ul>	proper siting and management.	facilities,
stations/landfills	- litter - visual	Siting: Depots and transfer stations should be sited in areas of compatible	<ul> <li>Possible displacement of community features and businesses</li> </ul>
	- traffic, truck queuing	land use. These facilities are expected	from location of new facilities.
	- noise	to be significantly smaller in seale	
	- clind safety - property devaluation	considerations for these types of	
	- illegal dumping at centre	facilities will need to address: truck	
		traffic, possibility of truck queuing,	
	Possible displacement of community	noise litter and possibility of excess	
	features and businesses from location of	storage.	
	new facilities.		
		<ul> <li>Facility management will need to</li> </ul>	
		control nuisance effects, and excess	
		materials. Many of these effects	
		could be controlled by proper site	
		design and planning (berms, fences,	
		etc.)	
•		Mitigation measures will need to be	
		developed on a system-wide basis for	
		the management of excess materials	
		as a result of over-supply of some	
		material markets. While these	
		materials may not be kept at the	
		depots/transfer stations, storage will	
		be required elsewhere.	
	,	<ul> <li>Odour effeets can be best controlled</li> </ul>	
		by having a low contamination rate.	

Component Category/Components Potential Effects	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Promotion and Education			
on program for	· No effect	· Mitigation not required	· No effect
wet/dry system · Promotion/education program for			
source reduction/pre-cycling, reusc			
and recycling			
<ul> <li>3Rs promotion and education</li> </ul>			
program			
<ul> <li>Consumer education program</li> </ul>			



# TABLE H5.5 GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY: GTA

\* System : Residential Wet/Dry : Potential For Broad Social Impact Indicator: Potential for Lifestyle Change CRITERION

Component Category/Components Potential Effect	Potential Effect	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal			
Curbside Collection of residential garbage from single family dwellings in three streams Collection of residential garbage from multi-family units in three streams streams. Self haul of garbage Self haul of garbage.	Potential for a variety of minor litestyle ceffects associated with the Wet/Dry bin system. Nuisance effects could include: system. Nuisance effects could include: octor, waste siteking to bins, the bins could be difficulties associated with cleaning the bins, insects, moving the bins in winter, snowbanks, lack of space for 90 gallon bins, etc. (City of Guelph, 1991).	Mitigation could include a variety of measures. To control effects associated with waste sticking to bins, the bins could be lined with bags.  Optional smaller cans may be needed for the elderly and for those with a lack of space.	Potential for a variety of minor lifestyle inconvenences associated with bins.  Fifects may be greater in high density areas.
	areas.		

Component Catégory/Components	Potential Effect	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection			
Provide carts to all single family households Separation of waste into three streams Drop-off depot for multi-family residents not serviced by recycling Drop-off depot for rural households	Potential for a variety of minor lifestyle effects associated with the Wet/Dry bin system. Nuisance effects could include: odour, waste sticking to bins, difficulties associated with cleaning the bins, insects, moving the bins in winter, snowbanks, lack of space for 90 gallon bins, etc. (City of Guelph, 1991).  The change from a traditional Blue Box system to Wet/Dry requires residents to significantly change their sorting and recycling behaviour.  The Guelph experience tends to demonstrate a positive social and lifestyle effect, people are willing to do and learn more and it has become a source of personal and community	Ensure weekly pick-up. Ensure convenient drop-off locations for apartment dwellers and rural households. Assistance in the development of 3Rs apartment committees, "Welcome Wagons," etc. Ensure the provision of information and educational services for new residents (Environics, 1990). This must be a continual effort to address turnover and increase in densities.	Probably a positive social and lifestyle effect, people willing to do and learn more.  Variety of minor lifestyle inconveniences associated with bins. The bins may be too large for some residents to manage during the winter.
Residential Leaf and Yard Waste Collection			
Seasonal separate collection of leaf and yard waste     Drop-off depot for leaf and yard waste	Positive social and lifestyle effect, people willing to do and learn more, source of personal and community pride.  Encourages positive local action.	· Mitigation not required	<ul> <li>Positive social and lifestyle effect, people willing to do and learn more, source of personal and community pride.</li> </ul>

	Potential Effect	Mitigation/Enhancement	Component Net Effects
Residential Household Composting			
. Door-to-door distribution of	. Positive social and lifestyle effect	. Address complaints (o. v. ill.fitting	. Docitive excipt and lifestula officet
to morning common to one	results william to do and hour more	id-	Toshive social and linestyle circu,
oackyard composiers to 80% or	people willing to do and learn more,	lids, insufficient volume) of users.	people willing to do and learn more,
single family nouseholds	Source of personal and community	Provide Kitchen containers, nome	source of personal and community
. Large 3-bin composting units	pride.	delivery of composters, on-going	pride.
distributed to apartment and co-	<ul> <li>Encourages positive local action and</li> </ul>	subsidies (Environics 1990;	<ul> <li>Supports other 3Rs activities</li> </ul>
operative housing complexes	increases awareness in community.	Maclaren, 1990; Metropolitan Works	<ul> <li>Variety of lifestyle inconveniences</li> </ul>
<ul> <li>Vermi-composting for multi-family</li> </ul>	<ul> <li>Inconvenience and annoyance for a</li> </ul>	Committee, 1992).	
households	minority of people: (e.g., ill-fitting lids,	<ul> <li>Encourage community compost</li> </ul>	
	insufficient volumes, pests, lack of	challenges to promote and educate.	
	space, odours, scavenging animals).	<ul> <li>Ongoing education for proper use.</li> </ul>	
	<ul> <li>Program may have substantial potential</li> </ul>		
	to increase waste diversion (MacLaren,		
	1990; Environics, 1990).		
	Potential for odour and vermin		
	problems at composting facility.		
	<ul> <li>Residents of apartment buildings may</li> </ul>		
	experience an increase in insects and		
	rodents, odour and health concerns.		

Component Category/Components	Potential Effect	Mitigation/Enhancement	Component Net Effects
Other Residential Waste Diversion (HHW, Toxic Taxi, Pilot Wet/Dry, White Goods Collection, White Goods Drop-Off, etc.)			* .
Special curbside collections of Christmas trees Special and weekly curbside collections of white goods Drop-off depots for white goods Special curbside collection for bulky items Permanent drop-off depot for HHW Special HIW drop-off days Toxic Taxi service Mobile HHW depots	White goods disposal appears to be increasingly inconvenient and difficult; this has resulted in illegal dumping. Consumers may become much more concerned about size and durability of appliances and furniture. Residents may become more aware of HHW and white goods management and change purchasing attitudes.	Improved service for white goods and large items.  Develop special waste days and special depois for multi-family building collection.  Make collection drop-off point convenient for all households and/or continue toxic taxi.  Develop promotional/educational materials to emphasize alternatives to HHW for pest control, lawn & garden, cleaning agents, and paint and solvents. Encourage the use of 3Rs for IIHW and the separation of HHW from garbage (Manitoba Hazardous Waste Management Corporation, 1992).	Residents may become more aware of IIIIW and white goods management and change purchasing attitudes.
Composting Facilities  Central composting facilities (invessel or windrow) for composting of source separated household organic (wet stream)  Centralized windrow composting of leaf and yard waste	· No effect	· Mitigation not required	· No effect

Component Category/Components	Potential Effect	Mitigation/Enhancement	Component Net Effects
Reuse Centres and Activities			
Municipal reuse centre Private reuse centre Non-profit reuse centre Charitable reuse centres Food reuse organization Special goods exchange days	In some instances, has social welfare benefits  May contribute to acceptance of using repaired/second hand items rather than buying new products  Increased appeal and household economic benefits with future demographic changes. Can contribute to neighbourhood cohesiveness: and encourage communal garage sales, flea markets, bazaars, etc.	Provide incentives for establishing reuse centres and for holding "garage" sales.     Provide assistance in promoting special goods exchange days	Positive effect may contribute to acceptance of using repaired/second hand items rather than buying new products.  In some instances, has social welfare benefits Increased appeal and household economic benefits with future demographic changes. May contribute to neighbourhood cohesiveness: through communal garage sales, flea markets, bazaars, etc.
Public MRFs			
New MRF or improve/expand existing MRFs to process larger dry stream of recyclable	. No effect	Mingation not required	. No effect
Residential Recycling Depots and Transfer Stations			
<ul> <li>Drop-off depot for dry recyclable</li> <li>Depots located at transfer stations/landfills</li> </ul>	· No effect	Mitigation not required	. No effect

		4	Charles Mark 10 Stocker
Component Category/Components	Potential Effect	Mitigation/Enhancement	Component iver Ellects
Residential Promotion and Education			
Promotion/education program for wet/dry system Promotion/education program for source reduction/pre-cycling, reuse and recycling  3Rs promotion and education program Consumer education program	One of the criticisms of the Wet/Dry System, is that it does not force people to actively think about recycling, reusing or reducing their waste. Promotion of the system may or may not encourage 3Rs thinking and a change in lifestyle. If positive effects are to be achieved, extensive efforts into developing wet/dry promotional/educational programs will be needed.	Development of a variety of educational and promotional tools for 3Rs education.  Evaluate Guelph's Wet/Dry Education and Promotion Programs to identify key educational elements.	Potential positive effect: encourages people to participate and understand the system.

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# TABLE H5.6 GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY: GTA CRITERION: Potent

Y: GTA System: Residential Wet/Dry: Potential For Broad Social Impact Indicator: Potential Effects on Employment

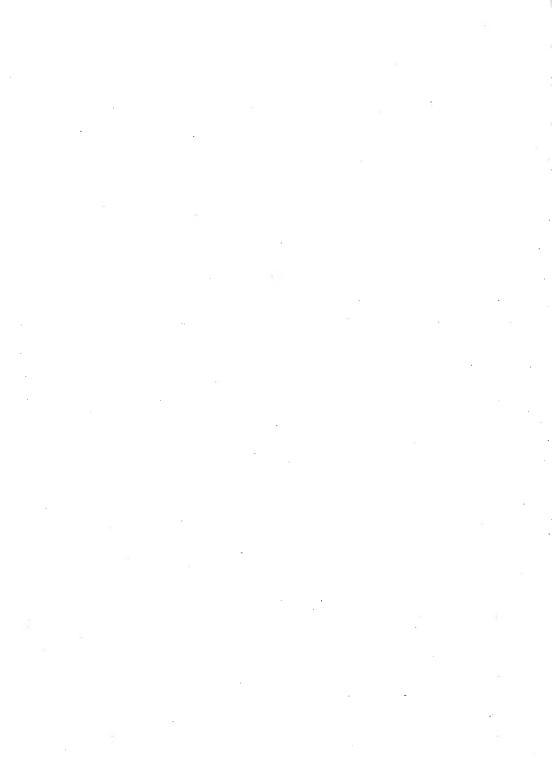
Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal  Curbside Collection of residential garbage from single family dwellings in three streams  Collection of residential garbage from multi-family units in three streams  Self haul of garbage  Regional recycling legislation	. No effect	· Mitigation not required	. No effect
Residential Recycling and Collection  Provide carts to all single family households Separation of waste into three streams Drop-off depot for multi-family residents not serviced by recycling Drop-off depot for rural households Drop-off depot for rural households	Direct employment gains, primarily in low skill jobs, are likely in recycling industries and in wet/dry collection. Indirect effects could include both short and long-term changes in secondary and tertiary employment. Magnitude, timing and direction of effects are uncertain. As recycling becomes more centralized, the recycling industries may become more specialized and centralized. Employment opportunities may occur only at one	A transition to conserver attitudes has major implications for the economy and employees. Mitigation is likely to occur as the economy readjusts to 4ks management. There should be a partnership between government, business, and labour to lacilitate this change in attitude. Education and retraining will be key components to help the working population adapt to new and evolving sectors in the "green" economy.	Direct employment gains, primarily in low skill jobs, are likely in recycling industries and in wel/dry collection. Indirect effects could include both short and long-term changes in secondary and tertiary employment. Magnitude, timing and direction of effects are uncertain. As recycling becomes more centralized, the recycling industries may become more specialized and centralized. Employment opportunities may occur only at one location in the CTA or
	location in the GTA or elsewhere in North America.		Mitigation should enhance benefits.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Leaf and Yard Waste Collection			*
Seasonal separate collection of leaf and yard waste     Drop-off depot for leaf and yard waste	No effect	Mitigation not required	· No effect
Residential Household Composting			
Door-to-door distribution of backyard composters to 80% of single family households. Large 3-bin composting units distributed to apartment and cooperative housing complexes. Vermi-composting for multi-family households.	Direct employment gains, primarily in low skill jobs, are likely in the manufacturing of composters and in the management of the program. Magnitude, timing and direction of effects is uncertain. Indirect effects could include both short and long term changes in secondary and tertiary employment.	A transition to conserver attitudes has major implications for the economy and employees. Mitigation is likely to occur as the economy readjusts to 3Rs management. There should be a partnership between government, business and labour to facilitate this change in attitude. Education and retraining will be key components to help the working population adapt to new and evolving sectors in the "green" economy.	Direct employment gains, primarily in low skill jobs, are likely in the manufacturing of composters and in the management of the program. Magnitude, timing and direction of effects is uncertain. Indirect effects could include both short and long term changes in secondary and tertiary employment. Mitigation should enhance benefits.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Other Residential Waste Diversion (HHW, Toxic Taxi, Pilot Wet/Dry, White Goods Collection, White Goods Drop-Off, etc.)			
Special curbside collections of     Christmas trees     Special and weekly curbside     collections of white goods     Drop-off depois for white goods	Minor direct employment effect in these programs. Indirect effects could include both short and long term changes in secondary and ertiary employment. Magnitude, tertiary employment.	A transition to conserver attitudes has major implications for the economy and employees. Mitgation is likely to occur as the economy readjusts to 3Rs management. There should be a	Minor direct employment effect in these programs. Indirect effects could include both short and long term changes in secondary and tertiary employment. Magnitude,
	timing and direction of effects is uncertain.	partnership between government, business and labour to facilitate this change in attitude. Education and retraining will be key components to help the working population adapt to new and evolving sectors in the "resear" accordance.	timing and direction of effects is uncertain.
Composting Facilities			
Central composting facilities (invessel or windrow) for composting of source separated household organic (wet stream)     Centralized windrow composting of leaf and yard waste	Direct employment gains, primarily in low skill jobs, are likely at the composting facilities and in the management of the program. Indirect effects could include both short and long term changes in secondary and tertiary employment. Magnitude, timing and direction of effects is uncertain.  Minor short-term increase in construction sector employment.	· Mitigation not required	Minor increase in low skill jobs.     Minor short-term increase in construction sector employment.     Long term effects uncertain.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Reuse Centres and Activities	-		
Municipal reuse centre Private reuse centre	in low skill jobs, are likely at these	<ul> <li>Mitigation not required</li> </ul>	<ul> <li>Minor increase in low skill jobs</li> <li>Long term effects uncertain</li> </ul>
Charitable reuse centres	include both short and long term		
Food reuse organization     Special goods exchange days	changes in secondary and tertiary employment. Magnitude, timing and		
	direction of effects is uncertain.		
Public MRFs			
New MRF or improve/expand     existing MRFs to process larger dry	Direct employment gains, primarily in low skill jobs, are likely at the	· Mitigation not required	Short term increase in low skill jobs Minor short-term increase in
stream of recyclable	MRFs and in the management of the program. Indirect effects could		construction sector employment.  Long term effects uncertain
	include both short and long term		
	employment. Magnitude, timing and direction of effects is uncertain		
	Minor short-term increase in construction sector employment.	·	
Residential Recycling Depots and Transfer Stations			
Drop-off depot for dry recyclable	Direct employment gains, primarily     in low skill jobs are likely in bandage.	· Mitigation not required	Minor short term increase in low skill iohs
stations/landfills	and in the management of the		Minor short-term increase in
	program. Indirect effects could include both short and long term		construction sector employment.  Long term effects uncertain.
	changes in secondary and tertiary		
	employment. Magnitude, timing and direction of effects is uncertain.		
	<ul> <li>Minor short-term increase in construction sector employment.</li> </ul>		

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Promotion and Education			
Promotion/education program for wet/dry system     Promotion/education program for source reduction/pre-cycling, reuse and recycling     3Rs promotion and education program     Consumer education program	Direct employment gains, primarily in low skill jobs, are likely in printing, production and distribution. Indirect effects could include both short and long term changes in secondary and tertiary employment. Magnitude, timing and direction of effects is uncertain.	A transition to conserver attitudes has major implications for the economy and employees. Mitigation is likely to occur as the economy readjusts to 3Rs management. There should be a partnership between government, business and labour to facilitate this change in attitude. Education and retraining will be key components to help the working population adapt to new and evolving sectors in the "green" economy.	Minor short term employment gains.     Long term effects uncertain.



### GENERIC COMPONENTS NET EFFECTS TABLE H5.7

MUNICIPALITY: GTA
System: Residential Wet/Dry
CRITERION: Potential For Broad Social Impact Indicator: Potential Effects on Economic Development

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal  Curbside Collection of residential garbage from single family dwellings in three streams Collection of residential garbage from multi-family units in three streams Self haul of garbage Regional recycling legislation	· No effect	· Mitigation not required	· No effect
Residential Recycling and Collection  Provide carts to all single family households  Separation of waste into three streams Drop-off depot for multi-family residens not serviced by recycling Drop-off depot for rural households	Direct economic benefits are likely in recycling industries, and in wel/dry collection. Indirect economic effects could include both short and longuern changes in secondary and tertiary sectors. Magnitude, timing and direction of effects is uncertain. Over the long-term, this initiative could lead to the development of marketable "green" systems, technologies, and products in the GTA (Mercer, 1993).	The economic base is shifting from manufacturing to a more service orientation. Along with this trend is the movement towards a "green" economy. This transition is being made by various companies and sectors. However, the long-term competitiveness of the region may be dependent on the others making the transition as well. Government, business and environmental interests should work in partnership to facilitate this transition (eg. Roundtables on the Economy and the Environment), and grasp the opportunities for marketing "green" systems and technologies nationally and internationally.	Direct economic benefits are likely in recycling industries, and in wel/dry collection. Indirect economic effects could include both short and long-term changes in secondary and tertiary sectors. Magnitude, timing and direction of effects is uncertain. Over the long-term, this initiative could lead to the development of marketable "green" systems, technologies, and products in the GTA (Mercer, 1993). Mitigation should enhance benefits.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Leaf and Yard Waste Collection			
Seasonal separate collection of leaf and No effect yard waste     Drop-off depot for leaf and yard waste	· No effect	· Mitigation not required	· No effect
Residential Household Composting			
Door-to-door distribution of backyard compositers to 80% of single family households     Large 3-bin compositing units distributed to apartiment and cooperative housing complexes     Vermi-composting for multi-family households	Minor direct economic benefits are likely in the manufacturing of composters, and in the management of the program. Indirect economic effects could include both short and long-term changes in secondary and tertiary sectors and cost savings from a reduction in landfill fees, due to reduced volumes. Magnitude, timing and direction of effects is uncertain. Over the long-term, this initiative could lead to the development of marketable "green" systems, technologies, and products in the GTA (although the industries could locate elsewhere in North America).	The economic base is shifting from manufacturing to a more service orientation. Along with this trend is the movement towards a "green" economy. This transition is being made by various companies and sectors. However, the long-term competitiveness of the region may be dependent on the others making the transition as well. Government, business and environmental interests should work in partnership to facilitate this transition (eg. Roundtables on the Economy and the Environment), and grasp the opportunities for marketing "green" systems and technologies nationally and internationally.	Minor direct economic benefits are likely in the manufacturing of composters, and in the management of the program. Indirect economic effects could include both short and long-term changes in secondary and tertiary sectors and cost savings from a reduction in landfill fees, due to reduced volumes. Magnitude, timing and direction of effects is uncertain.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Other Residential Waste Diversion (HHW, Toxic Taxi, Pilot Wet/Dry, White Goods Collection, White Goods Drop-Off, etc.)			
Special curbside collections of Christmas trees Special and weekly curbside collections of white goods Drop-off depois for white goods Special curbside collection for bulky items Permanent drop-off depot for HIIW Special HHW drop-off days Toxic Taxi service Mobile IIIIW depots	Minor direct economic benefits are likely in recycling industries, and in collection. Indirect economic effects could include both short and long-term changes in secondary and tertiary sectors and cost savings from a reduction in landfill fees, due to reduced volumes. Magnitude, timing and direction of effects is uncertain. Over the long-term, this initiative could lead to the development of marketable "green" systems, technologies, and products in the GTA (although the industries could locate elsewhere in North America).	The economic base is shifting from manufacturing to a more service orientation. Along with this trend is the movement towards a "green" economy. This transition is being made by various companies and sectors. However, the long-term competitiveness of the region may be dependent on the others making the transition as well. Government, business and environmental interests should work in partnership to facilitate this transition (eg. Roundtables on the Economy and the Environment), and grasp the opportunities for marketing "green" systems and technologies nationally and internationally	Minor direct economic benefits are likely in recycling industries, and in collection. Indirect economic effects could include both short and long-term changes in secondary and terriary sectors. Magnitude, timing and direction of effects is uncertain.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities	·		
Central composting facilities (in-vessel or windrow) for composting of source separated household organic (wet stream)     Centralized windrow composting of leaf and yard waste	Direct economic benefits are likely at composting facilities. Indirect economic effects could include both short and long-term changes in secondary and tertiary sectors.  Magnitude, timing and direction of effects is uncertain. Over the long-term, this initiative could lead to the development of marketable "green" systems, technologies, and products in the GTA (Mercer, 1993).  Provides a minor economic benefit in the construction sector.	The economic base is shifting from manufacturing to a more service orientation. Along with this trend is the movement towards a "green" economy. This transition is being made by various companies and sectors. However, the long-term competitiveness of the region may be dependent on the others making the transition as well. Government, business and environmental interests should work in partnership to facilitate this transition (eg. Roundtables on the Economy and the Environment), and grasp the opportunities for marketing "green" systems and technologies nationally and internationally.	Direct economic benefits are likely at composting facilities. Indirect economic effects could include both short and long-term changes in secondary and tertiary sectors. Magnitude, timing and direction of effects is uncertain. Over the long-term, this initiative could lead to the development of marketable "green" systems, technologies, and products in the GTA (Mercer, 1933).  Provides a minor economic benefit in the construction sector.
Reuse Centres and Activities			
Municipal reuse centre     Private reuse centre     Non-profit reuse centre     Charitable reuse centres     Food reuse organization     Special goods exchange days	Minor direct economic benefits are likely at these centres. Indirect economic effects could include both short and long-term changes in secondary and tertiary sectors. For example, decreased demand for new products. Over the long-term, this initiative could lead to a viable purchasing option for certain SES groups in the GTA.	· Mitigation not required	Minor direct economic benefits are likely at these centres. Indirect economic effects could include both short and long-term changes in secondary and tertiary sectors.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Public MRFs	,		
New MRF or improve/expand existing MRFs to process larger dry stream of recyclable	Provides the infrastructural support for recycling materials by the private and public sector.     Provides a minor economic benefit in the construction sector.	The economic base is shifting from manufacturing to a more service orientation. Along with this trend is the movement towards a "green" economy. This transition is being made by various companies and sectors. However, the long-term competitiveness of the region may be dependent on the others making the transition as well. Government, business and environmental interests should work in partnership to facilitate this transition (eg. Roundtables on the Economy and the Environment), and grasp the opportunities for marketing "green" systems and technologies nationally and internationally.	Indirect effect on economic development by providing the infrastructure required for recycling by the private and public sectors.  Provides a minor short term economic benefit in the construction sector.
Residential Recycling Depots and Transfer Stations			
Drop-off depot for dry recyclable     Depots located at transfer     stations/landfills	Provides the infrastructural support for recycling materials by the private and public sector.     Provides a minor economic benefit in the construction sector.	Mitigation not required	Indirect effect on economic development by providing the infrastructure required for recycling by the private and public sectors.     Provides a minor short term economic benefit in the construction sector.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Promotion and Education			
Promotion/education program for wet/dry system     Promotion/education program for source reduction/pre-cycling, reuse and recycling     3Rs promotion and education program     Consumer education program	Minor direct economic benefits are likely in printing, production and distribution. Indirect economic effects could include both short and long-term changes in secondary and tertiary sectors. Magnitude, timing and direction of effects is uncertain.	· Mitigation not required	Minor direct economic benefits are likely in printing, production and distribution. Indirect economic effects could include both short and long-term changes in secondary and terriary sectors. Magnitude, timing and direction of effects is uncertain.

#### BSLOPE

### GENERIC COMPONENTS NET EFFECTS TABLE H5.8

MUNICIPALITY: GTA CRITERION: Potent

: GTA System : Residential Wet/Dry : Potential For Broad Social Impact Indicator: Potential Operational Effects on Institutions, Commercial Enterprises and Industry

Component Category/Components	Potential Effects	Mitigatlon/Enhancement	Component Net Effects
Garbage Collection and Disposal			
· Curbside Collection of residential garbage from single family dwellings	All landlords may be required to provide space. facilities, and staff time.	Province to consider amending annual rent review annications to reflect	Potential increased costs for tringing
in three streams  Collection of residential parhage from	to accommodate the Wet/Dry System.	potentially increased costs to	Effects uncertain with material
multi-family units in three streams	Effects uncertain with recycling	ration on	oanning registation
Regional recycling legislation	icgistation.		
Residential Recycling and Collection			
· Provide carts to all single family	· All landlords may be required to	Landlords to include additional costs	Potential increased costs for
Separation of waste into three streams	to accommodate the Wet/Dry System.	ror recycling in annual rent review application.	tenants and landlords.
<ul> <li>Drop-off depot for multi-family residents not serviced by recycling</li> </ul>	They may also incur additional costs.		
· Drop-off depot for rural households			
Residential Leaf and Yard Waste			
	•		
Seasonal separate collection of leaf	. No effect	· Mitigation not required	. No effect
Drop-off depot for leaf and yard			
waste			
			-

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting  Door-to-door distribution of backyard composters to 80% of single family households  Large 3-bin composting units distributed to apartment and coopperative housing complexes  Vermi-composting for multi-family households	Landlords may be required to provide space and equipment for composters and may experience increased costs associate with insect and rodent control, staff, etc.	<ul> <li>Province to consider additional costs for recycling in annual rent review application.</li> </ul>	<ul> <li>Potential increase in costs for tenants and landlords</li> </ul>
Other Residential Waste Diversion (HHW, Toxic Taxi, Pilot Wet/Dry, White Goods Collection, White Goods Drop- Off, etc.)  Special curbside collections of Christmas trees Special and weekly curbside collections of white goods Drop-off depois for white goods Special curbside collection for bulky items Permanent drop-off depot for HHW Special HHW drop-off days Toxic Taxi service Toxic Taxi service	The efficiency (or ease) of white goods disposal may have an effect on the sale of white goods (customers may want vendors to take back their old products)  Because of the increasing inconvenience to consumers in disposing of old appliances/furniture, etc., they may start looking for, and there may be a growing market for, products which are smaller and more durable.	Retails stores could develop buy-back programs for large and bulky items. The consumer would then not be required to disperse items.  Allow small businesses to use mobile HHW at cost.	In the long-term institutions and commercial enterprises may develop programs to "buy back" used white goods.     Increased diversion of hazardous waste from small business.
	Small businesses may benefit from use of the mobile IIHW depots.		

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities  Central composting facilities (in-vessel or windrow) for composting of source separated household organic (wet stream)  Centralized windrow composting of leaf and yard waste	· No effect	· Mitigation not required	· No effect
Reuse Centres and Activities  Municipal reuse centre  Private reuse centre  Non-profil reuse centre  Charitable reuse centre  Food reuse organization  Special goods exchange days	· No effect	· Mitigation not required	. No effect
Public MRFs  New MRF or improve/expand existing MRFs to process larger dry stream of recyclable	· No effect	Mitigation not required	. No effect
Residential Recycling Depots and Transfer Stations  Drop-off depot for dry recyclable Depots located at transfer stations/landfills	· No effect	Mitigation not required	· No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Promotion and Education			
-	· No effect	· Mitigation not required	· No effect
Promotion/education program for			
source reduction/pre-cycling, reuse			
and recycling			
· 3Rs promotion and education			
program			
· Consumer education program			

# TABLE H5.9 GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY: GTA CRITERION: Distrit

: Distribution of Social Costs and Benefits

System : Residential Wet/Dry Indicator: Distribution of Socio-Economic Effects on Industry and Population Groups

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal  Curbside Collection of residential garbage from single family dwellings in three streams Collection of residential garbage from multi-family units in three streams Self haul of garbage Regional recycling legislation	· No effect	· Mitigation not required	. No effect
Residential Recycling and Collection  Provide carts to all single family households Separation of waste into three streams Drop-off depot for multi-family residents not serviced by recycling Drop-off depot for rural households	. No effect	· Mitigation not required	. No effect
Residential Leaf and Yard Waste Collection  · Seasonal separate collection of leaf and yard waste · Drop-off depot for leaf and yard waste	· No effect	Mitigation not required	· No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting			
Door-to-door distribution of backyard composters to 80% of single family households     Large 3-bin composting units distributed to apartment and cooperative housing complexes     Vermi-composting for multi-family households	. No effect	Mitigation not required	No effect
Other Residential Waste Diversion (HIIW, Toxic Taxi, Pilot Wet/Dry, White Goods Collection, White Goods Drop. * Off, etc.)			
Special curbside collections of Christman trees     Special and weekly curbside collections of white goods     Drop-off depois for white goods     Special curbside collection for bulky items     Permanent drop-off depot for HHW     Special HHW drop-off days     Toxic Taxi service     Mobile HHW depois	Residents of some municipalities are provided with white goods and HHW collection, while others are not.	Mitigation not required	<ul> <li>Minor effect in different level of service for white goods and HHW collection in some municipalities.</li> </ul>

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities  Central composting facilities (in-vessel or windrow) for composting of source separated household organic (wet stream)  Centralized windrow composting of leaf and yard waste	Local residents and businesses may receive nuisance effects related to composting for all region residents.	Site the composting facility in a non-residential area and away from sensitive industry and committed uses. Develop appropriate mitigation/compensation for site related impacts.  Address equity issue aspect of the siting process.	Negative distribution effects on some local communities, population groups, and industries.
Reuse Centres and Activities  Municipal reuse centre  Private reuse centre  Non-profit reuse centre  Charitable reuse centres  Food reuse organization  Special goods exchange days	Positive effect for lower income groups as more low cost items available and adds potential market for their goods.	. Mitigation not required	Positive effect for lower income groups as more low cost items available and adds potential market for their goxds.
Public MRFs  New MRF or improve/expand existing MRF to process larger dry stream of recyclable	Potential negative distribution effects     on some groups living near facility	Mugation as "Potential Effects on Residents"	Potential negative distribution effects on some groups living near facility
Transfer Stations  Transfer Stations  Drop-off depot for dry recyclable  Depots located at transfer stations/landfills	Potential negative distribution effects on some groups living near facility	Mitigation as "Potential Effects on Residents"	Potential negative distribution effects on some groups living near facility

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Promotion and Education			
Promotion/education program for	. No effect	· Mitigation not required	. No effect
Promotion/education program for			
source reduction/pre-cycling, reuse			
and recycling			
· 3Rs promotion and education			
program			
· Consumer education program			

# TABLE H5.10 GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY: GTA CRITERION: Distrib

: Distribution of Social Costs and Benefits Indicator: Distrib

System: Residential Wet/Dry Indicator: Distribution of Lifestyle Effects

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection  Curbside Collection of residential garbage from single family dwellings in three streams  Collection of residential garbage from multi-family units in three streams  Self haul of garbage  Regional recycling legislation	Potential for minor difference in lifestyle effects between high density and low density developments.	· Mitigation not required	Potential for minor difference in lifestyle effects between high density and low density developments.
Residential Recycling and Collection  Provide carts to all single family households  Separation of waste into three streams  Drop-off depot for multi-family residents not serviced by recycling  Drop-off depot for rural households	Potential for minor difference in lifestyle effects between high density and low density developments.	Mitigation not required	Potential for minor difference in litestyle effects between high density and low density developments.
Residential Leaf and Yard Waste Composting Seasonal separate collection of leaf and yard waste Drop-off depot for leaf and yard waste	· No effect	· Mitigation not required	No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting  Door-to-door distribution of backyard composters to 80% of single family housebolds  Large 3-bin composting units distributed to apartment and co-operative housing complexes  Vermi-composting for multi-family households	· Equitable distribution of services	· Mitigation not required	· Equitable distribution of services
Other Residential Waste Diversion (HFW, Toxic Taxi, White Goods, etc.)  Special curbside collections of Christmas trees  Special and weekly curbside collections of white goods  Drop-off depots for white goods  Special curbside collection for bulky items  Permanent drop-off depot for HHW  Special HHW drop-off days	. No effect	. Mitigation not required	. No effect
Toxic Tittly disposal days     Toxic Taxi service     Mobile HHW depots      Composting Facilities     Central composting facilities (in-vessel or windrow) for composting of source separated household organic (wet stream)     Centralized windrow composting of leaf and yard waste	No effect	. Mitigation not required	No effect

Reuse Centres  Municipal reuse centre  Private reuse centre  Non-profit reuse centre  Charlable reuse centres  Food reuse organization  Special goods exchange days		
cuse centre se centre reuse centre reuse centres organization ds exchange days		
Chantague reuse centres     Food reuse organization     Special goods exchange days	 · Mitigation not required	· No effect
	,	
Public MRFs		
New MRF or improve/expand existing     MRFs to process larger dry stream of recyclable	· Mitigation not required	. No effect
Residential Recycling Depots and Transfer Stations		
Drop-off depot for dry recyclable     Depots located at transfer     stations/landfills	· Mitigation not required	. No effect
Residential Promotion and Education		
Promotion/education program for wet/dry system     Promotion/education program for source reduction/pre-cycling, reuse and recycling     Rs promotion and education program     Consumer education program	· Mitigation not required	· No effect



# TABLE HS.11 GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY: GTA

CRITERION

System : Residential Wet/Dry Indicator: Potential Future Generational Effects of System

: Distribution of Social Costs and Benefits

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal			
Curbside Collection of residential garbage from single family dwellings in three streams Collection of residential garbage from multi-family units in three streams Self haul of garbage Regional recycling legislation	. No effect	· Mitigation not required	. No effect
Residential Recycling and Collection  Provide carts to all single family households Separation of waste into three streams Upop-off depot for multi-family residents not serviced by recycling Drop-off depot for rural households	Potentially positive effect through more sustainable use of resources and conservation of the environment for future use/enjoyment.	Continue to promote and educate on 3Rs (Hay, ND: Lesnicki, 1993; Morgan-Fraser, 1993; Watson, 1993).  The likely overall benefit to future generations needs to be emphasized in promoting these programs. It needs to be stressed that an entire generation is willing to make some sacrifices to ensure the future prosperity of their	Potentially positive effect through more sustainable use of resources and conservation of the environment for future use/enjoyment.
		children/grandchildren.	

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Leaf and Yard Waste Collection			
Seasonal separate collection of leaf and yard waste  Drop-off depot for leaf and yard waste	Costly to start-up and establish but may have environmental benefits in the long run. May be better to have the yard waste composted at the household (e.g., much leaves, grass and branches).	Evaluate the best approach to management of leaf and yard waste. Address residential on-site mulching, chipping, and composting. Could reduce the need for collection costs and cost for large, centralized facilities in the long term and may pass on to future generations a better process (less facility management/decommissioning cost).	Costly to start-up and establish but may have environmental benefits in the long run. May be better to have the yard waste composted at the household (e.g., much leaves, grass and branches).
Residential Household Composting			
Door-to-door distribution of backyard composters to 80% of single family households     Large 3-bin composting units distributed to apartment and cooperative housing complexes     Vermi-composting for multi-family households	Moderately costly to start-up and establish but environmentally beneficial to future generations due to a support for a change in behaviour to reduction and reuse.	<ul> <li>Promotion and education should increase future participation rate (Environtes, 1990).</li> </ul>	Positive effect of passing on a healthier environment with resources more available, through support for change in behaviour to reduction and reuse.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Other Residential Waste Diversion (IIIW, Toxic Taxi, Pilot Wet/Dry, White Goods Collection, White Goods Drop- Off, etc.)  Special curbside collections of Christmas trees Special and weekly curbside collections of white goods Drop-off depots for white goods Special curbside collection for bulky items Permanent drop-off depot for HIIW Special IIIW drop-off days Toxic Taxi service Mobile IIIW depots	Positive effect of providing a cleaner environment for the future through support for change in behaviour to repair, reuse and proper disposal.	. Mitigation not required	Positive effect of providing a cleaner environment for the future through support for change in behaviour to repair, reuse and proper disposal.
Composting Facilities  Central composting facilities (in-vessel or windrow) for composting of source separated household organic (wet stream)  Centralized windrow composting of leaf and yard waste	Costly to start-up and establish but environmentally and possibly economically beneficial in the long run.	Evaluate the best approach to management of leaf and yard waste. Address residential on-site mulching, chipping and composting. Could reduce the need for collection costs and costs for large, centralized facilities in the long term.	· Minor positive future generational cifect
Reuse Centres and Activities  Municipal reuse centre  Private reuse centre  Non-profit reuse centre  Charitable reuse centres  Food reuse organization  Special goods exchange days	Should encourage/support repair and reuse of white goods, etc., reduce the use of resources for manufacture of new products, leaving natural resources for the future.	<ul> <li>Province to consider removing Provincial Sales Tax or other provincial taxes for the sale of used goods.</li> </ul>	<ul> <li>Positive effect through the support for repaired and reused goods and subsequent reduction of resource use.</li> </ul>

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Public MRFs			
New MRF or improve/expand existing     MRFs to process larger dry stream of	Costly to start-up and establish because of market development, but	· Mitigation not required	Positive effect as the current generation is paying the cost for
recyclable	environmentally and possibly economically beneficial in the long		changing to more sustainable behaviour, which should leave future
	run.  Current generation paying the cost for altering behaviour to a more sustainable society.		with cleaner environment and more resources available.
Residential Recycling Depots and Transfer Stations			
Drop-off depot for dry recyclable     Depots located at transfer     stations/landfills	<ul> <li>Costly to start-up and establish because of market development, but environmentally and possibly economically beneficial in the long run. Current generation paying the cost for altering behaviour to a more sustainable society.</li> </ul>	· Mitigation not required	Positive effect as the current generation is paying the cost for changing to more sustainable behaviour, which should leave future with cleaner environment and more resources available.
Residential Promotion and Education			
Promotion/education program for wet/dry system     Promotion/education program for source reduction/pre-cycling, rcuse and recycling     Rs promotion and education program     Consumer education program     Consumer education program	Should have positive effects in changing current attitudes and behaviours to a more sustainable society which should leave future generations with cleaner environment and more resources available.	Education material could emphasize the benefits to future generation of 3Rs actions today.	Positive effects in changing current attitudes and behaviour to a more sustainable society, which should leave future with cleaner environment and more resources available.

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# TABLE H6.1 GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY: GTA

CRITERION

: OTA: : Potential Local Community Impacts

System: Residential Mixed Waste Processing Indicator: Potential Effects on Residents

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal			
arbaige Collection of residential garbage from single family dwellings Collection of residential garbage from multi family miles in these streams	· No effect	· Mitigation not required	. No effect
munt-adminy units in titree streams Self haul of garbage Regional recycling legislation Drop-off depot for rural households			
Residential Recycling and Collection			
· Curbside collection of Blue Box materials	. No effect	· Mitigation not required	. No effect
Expanding curbside collection Collection of bins of recyclables from			
multi-tamily units  Drop-off depot for multi-family			
Community recycling centres     Recycling at all multi-family buildings			
of greater than 6 units			
Drop-off depot for rural households			
Residential Leaf and Yard Waste Collection			
<ul> <li>Curbside collection of leaf and yard waste</li> </ul>	· No effect	· Mitigation not required	. No effect
Drop-off depot for leaf and yard waste			

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting  Door-to-door distribution of backyard composters to 80% of single family households  Large 3-bin composting units distributed to apartment and cooperative housing complexes  Vermi-compostine for multi-family	· No effect	· Mitigation not required	. No effect
households			
Other Residential Waste Diversion (HHW, Toxic Taxi, Pilot Wet/Dry, White Goods Collection, White Goods Drop-Off, etc.)			
Special curbside collections of Christmas trees     Special and weekly curbside collections of white goods     Drop-off depots for white goods     Special curbside collection for bulky items     Permanent drop-off debot for HHW	. No effect	· Mitigation not required	. No effect
· Special HHW drop-off days · Toxic Taxi service · Mobile HHW depots			

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities		ē	
Centralized windrow composting of leaf and yard waste In-vessel composting of source separated organics New mixed waste processing and composting facility	Potential nuisance effects:  - odour  - scavenging animals and birds  - visual  - illegal dumping  - traffic, truck queuing  - noise  - child safety  - property devaluation  - stigma for neighbourhood  - Health concerns  Potential odour effects have been significant enough to have leaf and yard waste composting facilities closed (RIS, 1993, J. Scott, 1993). These effects may be much more extensive with a mixed waste system.  - Possible displacement of residents for the location of a new facility.	Existing facilities: Proper management of the material must be maintained in reducing odour and scavenging animal problems.  MOEE proposed regulations (MOEE, 1993) do not appear to mitigate all of the documented effects.  Composting sites should be located in areas of compatible land use. The siting considerations for these types of facilities should address: odour, heavy truck traffic, truck queuing nuisance and litter.  State-of-the-art odour control features should be design requirements. Local residents should be on the management/monitoring committees (Lesnicki, 1993).  As management of the facility should comply with all operational requirements should be reviewed frequently due to the limited experience in composting on a large scale.  Research does not indicate an association between occupational health problems and composting because dose-response issues are not resolved. (Maritato et al., 1992). However, health effects could be monitored for workers and the neighbouring residents over an initial period at the required facility (Taylor, 1993).	Possible displacement of residents for the location of a new facility.  Potential for significant odour effect from Mixed Waste Processing and Composting facility. Virtually all plants in the US have significant odour problems that have led to their permanent or temporary closure. May be difficult to site.  May be difficult to site.  Mitigation measures may have only a limited effect.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities (continued)			
Centralized windrow composting of leaf and yard waste     In-vessel composting of source separated organics     New mixed waste processing and composting facility		Some effects likely to be mitigated over time due to greater familiarity with effects and mitigation (e.g. improvements to siting design, operations and technology).	
Reuse Centres and Activities  Municipal reuse centre Private reuse centre Non-profit reuse centre Charitable reuse centres Food reuse organization Special goods exchange days	traffic concerns visual effect of large bins in plazas	Locate Reuse Centres in areas of compatible land use.	· No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Public MRFs			
· Processing centre for dry recyclables	Potential nuisance effects: - litter - visual - traffic, truck queuing - noise - children safety - property devaluation - illegal dumping at centre - lilegal dumping at centre ricom the siting of a new facility.	Mitigation will need to encompass proper siting and management.  Siting: MRI's should be sited in areas of compatible land use. The siting considerations for these types of facilities will need to address: heavy truck traffic, noise, visibility, fruck queuing, litter, and the possibility of excess storage (Lesnick, 1993).  Management: The Facility will need to be managed in such a way as to control dust, litter, odour, rodents and other pests, and excess materials. Many of these effects could be controlled by proper site design and planning (berms, fences, etc.)  Mitigation measures will need to be developed on a system-wide basis for the management of excess materials as a result of over-supply of some material markets. While these materials may not be kept at the MRI's, storage will be required elsewhere.	Possible displacement of residents from the stinn of a new facility.  Nuisance effects from traffic litter and noise. Magnitude of effects may be minimized by proper siting considerations of new facilities and proper management.
		monitoring/ management committee.	

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations	,		
Depots located at transfer stations	Potential nuisance effects:  - litter  - visual  - traffic, truck queuing  - noise  - child safety  - property devaluation  - illegal dumping at centre  - Possible displacement for new facilities	Phigation will need to encompass proper sting and management. Siting: Depots and transfer stations should be sited in areas of compatible land use. These facilities are expected to be significantly smaller in scale than Public MRFs. The siting considerations for these types of facilities will need to address: truck traffic, possibility of truck queuing, noise, visibility, litter, and possibility of excess storage.  Management: The Facility will need to be control nuisance effects, and excess materials. Many of these effects could be controlled by proper site design and planning (berms, fences, etc.)  Mitigation measures will need to be developed on a system-wide basis for the management of excess materials as a result of over-supply of some material markets. While these materials may not be kept at the depots/transfer stations, storage will be required elsewhere.	Potential minor nuisance effects at some facilities     Possible displacement for new facilities
Residential Promotion and Education Promotion/education program for source reduction/pre-cycling, reuse and	. No effect	Mitigation not required	. No effect
recycling  3.8s promotion and education program  Consumer education program			

### TABLE H6.2 GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY: GTA

CRITERION

: OTA: : Potential Local Community Impacts

System : Residential Mixed Waste Processing Indicator: Potential Effects on Special and Sensitive Groups

Component Category/Components	Potential Effects	Mitlgation/Enhancement	Component Net Effects
Garbage Collection and Disposal  Curbside Collection of residential garbage from single family dwellings Collection of residential garbage from multi-family units Self haul of garbage Regional recycling legislation Drop-off depot for rural households	. No effect	Mitigation not required	· No effect
Residential Recycling and Collection  Curbside collection of Blue Box materials  Expanding curbside collection  Collection of bins of recyclables from multi-family units  Drop-off depot for multi-family residents not serviced by recycling  Community recycling centres  Recycling at all multi-family buildings of greater han 6 units  Blue Box recycling mandated  Engineered recycling depot  Drop-off depot for rural households	Ederly/physically challenged may have difficulty carrying/lifting blue box or dropping off at depois.	Provide maximum convenience possible.	. Greater inconvenience for clderly and physically challenged.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Leaf and Yard Waste Collection  • Curbside collection of leaf and yard waste  • Drop-off depot for leaf and yard waste	. No effect	Mitigation not required	. No effect
Residential Household Composting  Door-to-door distribution of backyard composters to 80% of single family households  Large 3-bin composting units distributed to apartment and co-operative housing complexes  Vermi-composting for multi-family households	· No effect	· Mitigation not required	. No effect
Other Residential Waste Diversion (HHW, Toxic Taxi, Pilot Wet/Dry, White Goods Collection, White Goods Drop-Off, etc.)  Special curbside collections of Christmas trees  Special and weekly curbside collections of white goods  Drop-off depots for white goods  Drop-off depots for white goods  Special curbside collection for bulky items  Permanent drop-off depot for HHW  Special HHW drop-off days  Toxic Taxi service  Mobile HHW depots	<ul> <li>Possible occupational safety concerns with drivers and handlers of HHW.</li> </ul>	· HHW education for driver/handlers	Minor possible occupational safety concerns with drivers and handlers of HHW

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities  Centralized windrow composting of leaf and yard waste In-vessel composting of source separated organics New mixed waste processing and composting centre	Although the research (Curtis et al., 1991) indicates that properly managed compositing produces a safe product, there are:  Possible important health effects on allergy sufferers, people with respiratory ailments, people with immuno-deficiencies because of mixed waste processing facility.  Possible employee health concerns (Taylor, 1993) associated with mixed waste processing.	Since the destruction of pathogens in compost is directly proportional to the temperature increases achieved in the piles (Curtis et al., 1991), appropriate operational procedures should be instituted to maximize this destruction.  Prudence dictates that employees should practise proper hygiene and wear protective clothing.  Health effects monitoring for employees and high-risk residents should be an operational condition.	Potential for significant nuisance and health effect from mixed waste processing and composting facility on altergy sufferers, people with immuno deficiencies, etc.     Potential for health effects on altergy sufferers, people with immuno deficiencies, etc. from composting.     Employees at MWPC and compost facilities may be subjected to a variety of health and safety hazards. Possibility of significant effects on employees at MWPC facility.
Reuse Centres and Activities  Municipal reuse centre  Private reuse centre  Non-profit reuse centre  Charitable reuse centres  Food reuse organization  Special goods exchange days	Food contamination issue and liability concerns of donors (Wrigley, 1993).     Positive effect for low-income and disabled groups     Possible transfer of pests in reuse centers, exchange days	Train food distribution groups in potential contamination/spoilage. Province to consider "Good Samaritan" Legislation to absolve donor of responsibility. Cleaning and fumigation of materials.	. No effeet
Public MRFs  Processing centre for dry recyclables	<ul> <li>Possible employee health/safety concerns</li> </ul>	Educate/frain employees on health and safety hazards and precautions.	Possible employee health/safety concerns. Should be minimized by mitigation.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations			
<ul> <li>Drop-off depot for dry recyclables</li> <li>Depots located at transfer stations</li> </ul>	Possible employee health/safety concerns	Educate/train employees on health and safety hazards and precautions.	No effect
Residential Promotion and Education  Promotion/education program for source reduction/pre-cycling, reuse and recycling  3Rs promotion and education program  Consumer education program	· No effect	· Mitigation not required	· No effect

# TABLE H6.3 GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY: GTA

CRITERION

: Potential Local Community Impacts

System: Residential Mixed Waste Processing Indicator: Potential Effects on Community

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal			
Curbside Collection of residential garbage from single family dwellings     Collection of residential garbage from multi-family units     Self haul of garbage     Regional recycling legislation     Drop-off depot for rural households	· No effect	Mitigation not required	. No effect
Residential Recycling and Collection			
Curbside collection of Blue Box materials Expanding curbside collection Collection of bins of recyclables from multi-family units Drop-off depot for multi-family residents not serviced by recycling Community recycling centres Recycling at all multi-family buildings of greater than 6 units Blue Box recycling madated Engineered recycling depot Drop-off depot for rural households	Minor traffic inconvenience in communities where materials are sorted at the truck  Possible increase in community pride	· Mitigation not required	Minor traffic inconvenience in communities where materials are sorted at the truck     Possible increase in community pride

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Leaf and Yard Waste Collection  Curbside collection of leaf and yard waste  Drop-off depot for leaf and yard waste	. No effect	. Mitigation not required	. No effect
Residential Household Composting  Door-to-door distribution of backyard composters to 80% of single family households  Large 3-bin composting units distributed to apartment and cooperative housing complexes  Vermi-composting for multi-family households	No effect	Mitigation not required	· No effect
Other Residential Waste Diversion (HIW, Toxic Taxi, Pilot Wet/Dry, White Goods Collection, White Goods Drop-Off, etc.)  Special curbside collections of Christmas trees Special and weekly curbside collections of white goods Drop-off depots for white goods Special curbside collection for bulky items Permanent drop-off depot for HHW Special HHW drop-off days Toxic Taxi service Mobile HHW depots	Failure of programs tends to have a negative effect on community image. For example, couches, mattresses in vacant lots.	Develop incentives for people to donate useful large items, repair/reuse items or properly dispose of them.  Assistance in organization of community garage sales, flea markets etc.  Enforcement for illegal dumping	Minor negative community stigma effect on community image from illegal dumping

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities  Centralized windrow composting of leaf and yard waste Invessel composting of source separated organics New mixed waste processing and composting facility	Possible stigma effect in some communities	· State-of-the-art odour control should be an operational condition	<ul> <li>Possible stigma effect in some communities</li> </ul>
Reuse Centres and Activities  Municipal reuse centre  Private reuse centre  Non-profit reuse centre  Charitable reuse centre  Food reuse organization  Special goods exchange days	Possible stigma effect in some communities	<ul> <li>Location of the reuse centres in suitable land use area</li> </ul>	. No effect
Public MRFs  Processing centre for dry recyclables	<ul> <li>Possible stigma effect in some communities</li> </ul>	Mitigation not required	Possible stigma effect and disruption in some communities. Magnitude of effect dependant on site location and management of the facility.
Residential Recycling Depots and Transfer Stations	,		
Drop-off depot for dry recyclables     Depots located at transfer stations	. No effect	· Mitigation not required	· No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Promotion and Education			
· Promotion/education program for	· Possible increase in community pride	· Mitigation not required	Possible increase in community pride
source reduction/pre-cycling, reuse			
and recycling			
<ul> <li>3Rs promotion and education</li> </ul>			
program			
· Consumer education program			

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### GENERIC COMPONENTS NET EFFECTS TABLE H6.4

MUNICIPALITY: GTA

: Potential Local Community Impacts CRITERION

System : Residential Mixed Waste Processing Indicator: Potential Effects on Community Features and Businesses

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal  Curbside Collection of residential garbage from single family dwellings Collection of residential garbage from multi-family units Self haul of garbage Regional recycling legislation Drop-off depot for rural households	Possible nuisance effects on community features and businesses from traffic and havling.	· Mitigation not required	Possible minor nuisance effects     on community features and     businesses from traffic and     hauling.
Residential Recycling and Collection  Curbside collection of Blue Box materials  Expanding curbside collection  Collection of bins of recyclables from multi-family units  Drop-off depot for multi-family residents not serviced by recycling  Community recycling centres  Recycling at all multi-family buildings of greater than units  Of greater than units  Blue Box recycling depot  Engineered recycling depot  Drop-off depot for rural households	Possible nuisance effects on community features and businesses from traffic and hauling.	<ul> <li>Planning and co-ordination of haulage system to minimally disrupt local community features and businesses.</li> </ul>	Possible minor nuisance effects     on community features and     businesses from traffic and     hauling.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Leaf and Yard Waste Collection			
Curbside collection of leaf and yard waste     Drop-off depot for leaf and yard waste	· No effect	Mitigation not required	. No effect
Residential Household Composting			
<ul> <li>Door-to-door distribution of backyard composters to 80% of single family households</li> </ul>	. No effect	· Mittgation not required	· No effect
Large 3-bin composting units     distributed to apartment and co-     operative housing complexes     Vermi-composting for multi-family     households			
Other Residential Waste Diversion (HHW, Toxic Taxi, Pilot Wet/Dry, White Goods Collection, White Goods Drop-Off, etc.)			
Special curbside collections of Christmas trees     Special and weekly curbside collections of white goods     Drop-off depots for white goods     Special curbside collection for bulky	. No effect	· Mitigation not required	. No effect
items  Permanent drop-off depot for HHW  Special HHW drop-off days  Toxic Taxl service  Mobile HHW depots		*	

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities			
Centralized windrow composting of leaf and yard waste     In-vessel composting of source separated organics     New mixed waste processing and composting facility	Potential nuisance effects:	Existing facilities: Proper management of the material must be maintained in reducing odour and scavenging animal problems.  MOEE proposed regulations (MOEE; 1993) do not appear to mitigate all of the documented effects.  Composting sites should be located in areas of compatible land use. The siting considerations for these types of facilities should address: odour, heavy truck traffic, truck queuing, nose and litter. State-of-the-art odour control features should be design requirements. People who work at local businesses should be on the management/monitoring committees (Lesnicki, 1993).	Potential for significant odour effect from Mixed Waste Processing and Composting facility. Virtually all plants in the US have significant odour problems that have led to their permanent or temporary closure. May be difficult to site. Mitigation measures may have only a limited effect. Possible displacement of community features and businesses due to new facility location.
Reuse Centres and Activities			
Municipal reuse centre     Private reuse centre     Non-profit reuse centre     Charitable reuse centres     Food reuse organization     Special goods exchange days	Minor nuisance related effects on neighbouring features and businesses     Visual blight/image effect	· Mitigation not required	· No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Public MRFs			
· Processing centre for dry recyclables	Potential nuisance effects:     - litter     distract	<ul> <li>Mitigation will need to encompass proper siting and management.</li> <li>Strings MRF's should be sited in areas of</li> </ul>	Nuisance effects from traffic litter and noise. Magnitude of effects may be minimized by
	- traffic, truck queuing	compatible land use. The siting	proper siting considerations of
	- noise	considerations for these types of facilities	new facilities and proper
	- property devaluation	noise, visibility, truck queuing, litter, and	9
	- illegal dumping at centre	the possibility of excess storage (Lesnicki,	Possible displacement of community features and
	· Possible displacement of	Management: The Facility will need to be	businesses from the siting of a
	community features and businesses	managed in such a way as to control dust,	new facility.
	from string of a new facility.	excess materials. Many of these effects	
		could be controlled by proper site design	
		and planning (berms, fences, etc.).	
		<ul> <li>Mitigation measures will need to be</li> </ul>	
		developed on a system-wide basis for the	
		management of excess materials as a	
	-	result of over-supply of some material	
		markets. While these materials may not	
		be kept at the MRFs, storage will be	
		required elsewhere.	
		be on a monitoring/ management	
		committee.	
		Establish a consultant program with	
		business and feature operations near the	
		facility. If required establish a liaison	
		committee.	
		Some effects likely to be mitigated over	
		time due to greater familiarity with affects	
		and mitigation (e.g. improvements to siting	
		design, operations and technology).	

# TABLE H6.5 GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY: GTA
System: Residential Mixed Waste Processing
CRITERION: Potential For Broad Social Impact Indicator: Potential for Lifestyle Changes

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal			
Curbside Collection of residential garbage from single family dwellings     Collection of residential garbage from multi-family units     Self haul of garbage     Regional recycling legistion     Drop-off depot for rural households	· No effect	. Mitigation not required	. No effect
Residential Recycling and Collection			
Curbside collection of Blue Box materials  Fixpanding curbside collection Collection of bins of recyclables from multi-family units  Drop-off depot for multi-family residents not serviced by recycling Community recycling centres Recycling at all multi-family buildings of greater than 6 units  Blue Box recycling mandated Engineered recycling depot  Drop-off depot for rural households	Positive social and lifestyle effect, people willing to do and learn more, source of personal and community pride. However, the mixed waste processing component may have a negative effect because some people may not perceive a need for source separation. It may lead to counterproductive attitudes.  Bins may attract nuisances if not picked up often.	Finsure convenient location of dropof point for apartment dwellers.  Assistance in the development of 3Rs apartment committees, "Welcome Wagons", etc.  Finsure the provision of information and educational services for new residents (Environies, 1990). This must be a continual effort to address turnover and increase in future densities.  Finsure regular pick-up.	Positive social and lifestyle effect, people willing to do and learn more, source of personal and community pride. However, the mixed waste processing component may have a negative effect because some people may not perceive a need for source separation. It may lead to counter-productive attitudes.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Leaf and Yard Waste Collection			
Curbside collection of leaf and yard     waste	<ul> <li>Positive social and lifestyle effect, people willing to do and learn more,</li> </ul>	· Mitigation not required	<ul> <li>Positive social and lifestyle effect, people willing to do and learn</li> </ul>
· Drop-off depot for leaf and yard waste	source of personal and community		more, source of personal and community pride.
	Encourages positive local action.		
Residential Household Composting			
· Door-to-door distribution of backyard	· Positive social and lifestyle effect,	Address complaints (e.g., ill-fitting	· Positive social and lifestyle effect,
composters to 80% of single family households	people willing to do and learn more, source of personal and community	Provide kitchen containers, home	more, source of personal and
· Large 3-bin composting units	pride.	delivery of composters, on-going	community pride.
distributed to apartment and co-	<ul> <li>Encourages positive local action.</li> <li>Inconvenience and annovance for a</li> </ul>	Maclaren, 1990; Metropolitan	· Variety of lifestyle inconveniences.
· Vermi-composting for multi-family	minority of people: (e.g., ill-fitting lids,	Works Committee, 1992).	
households	insufficient volumes, lack of space,	Target apartments with action	
٠	odours, pests, scavenging animals).	Promotion/Education programs and	
	to increase waste diversion (MacLaren,	participation - modify composting	
	1990; Environics, 1990).	program/components as required.	
	Promotion of vermicomposting in	· On-going education for proper use.	
	apartments should increase awareness		
	and should lead to greater support for		
	and involvement in 3Rs.		
	· Potential for odour and vermin		
	problems at community composting		
	Lactury.  Residents of anartment huildings may		
	experience an increase in insects and	•	
*	rodents, odour and health concerns.		

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Other Residential Waste Diversion (HHW, Toxic Taxi, Pilot Wet/Dry, White Goods Collection, White Goods Drop- Off, etc.)			
Special curbside collections of Christmas trees Special and weekly curbside collections of white goods Drop-off depois for white goods Special curbside collection for bulky items Permanent drop-off depot for IIIIW Special IIIIW drop-off days Toxic Taxi service Mobile IIIIW depots	White goods disposal appears to be increasingly inconvenient and difficult; this has resulted in illegal dumping.     Consumers may become much more concerned about size and durability of appliances and furniture.     Residents may become more aware of HIHW and white goods management and change purchasing attitudes.	Improved service for white goods and large items.  Develop special waste days and special depots for multi-family building collection.  Make collection drop-off point convenient for all households and/or continue toxe taxi.  Develop promotional/educational materials to emphasize alternatives to HHW for pest control, lawn & garden, cleaning agents, and paint and solvents. Encourage the use of 3Rs for HHW from garbage (Manitoba Hazardous Waste Management Corporation, 1992).	Residents may become more aware of HHW and white goods management and change purchasing attitudes.
Composting Facilities			
Centralized windrow composting of leaf and yard waste     In-vessel composting of source separated organics     New mixed waste processing and composting facility	. No effect	Mitigation not required	No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Reuse Centres and Activities  Municipal reuse centre  Private reuse centre  Non-profit reuse centres  Charitable reuse centres  Food reuse organization  Special goods exchange days	In some instances, has social westare benefits.  May contribute to acceptance of using repaired/second hand items rather than buying new products.  Increased appeal and household economic benefits with future demographic changes. Can contribute to neighbourhood cohesiveness: and provide communal garage sales, sea markets, bazaars, etc.	. Provide incentives for establishing reuse centres and for holding "garage" sales.	Positive effect may contribute to acceptance of using repaired/second hand items rather than buying new products. In some instances, has social welfare benefits.  Increased appeal and household economic benefits with future demographic changes. May contribute to neighbourhood cohesiveness: through communal garage sales, flea markets, bazaars, etc.
Public MRFs			
· Processing centre for dry recyclables	· No effect	· Mitigation not required	No effect
Residential Recycling Depots and Transfer Stations			
<ul> <li>Drop-off depot for dry recyclables</li> <li>Depots located at transfer stations</li> </ul>	. No effect	· Mitigation not required	· No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Promotion and Education			
· Promotion/education program for	· Potentially encourages positive changes	· Expand and refine	· Potentially positive effect;
source reduction/pre-cycling, reuse and	to conserver and waste diversion	promotion/education programs to	encourages positive changes to
recycling	attitudes; emphasizing reduction and	target non-participating groups and	conserver and waste diversion
· 3Rs promotion and education program	reuse, as well as recycling, could lead	to allow for changes in	attitudes; emphasizing reduction
· Consumer education program	to lifestyle change.	demographic make-up of GTA	and reuse, as well as recycling,
	Could increase demand for packaging reduction (Favironce 1990)	(Environics, 1990; Morgan-Fraser,	could lead to lifestyle change.
		December (Educational programme	
		FIORIOGIAI/ EQUCATIONAL PLOBLAMS	
		should be based on successful	
		programs (e.g., Folz & Hazlett,	
0		1990). For example, pamphlets and	
		brochures (in utility bills, etc.) and	
		community information meetings.	
		<ul> <li>The role of the schools could be</li> </ul>	
		important, particularly for new	
		Canadians whose children are	
		receiving the only English	
		instruction in the family. Many	
		School Boards have environmental	
		education committees and the	
		schools are increasingly being led	
		by Principals & V.P.'s cager to	
		spread an environmental message.	



# TABLE H6.6 GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY: GTA System: Residential Mixed Waste Processing CRITERION: Potential For Broad Social Impact Indicator: Potential Effects on Employment

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal  Curbside Collection of residential garbage from single family dwellings Collection of residential garbage from multi-family units Self hall of garbage Regional recycling legislation Drop-off depot for rural households	· No effect	. Mutgation not required	. No effect
Residential Recycling and Collection			
Curbside collection of Blue Box materials     Expanding curbside collection     Collection of bins of recyclables from multi-family units     Drop-off depot for multi-family residents no serviced by recycling Community recycling centres     Community recycling centres     Recycling at all multi-family buildings of greater than 6 units     Blue Box recycling depot     Engineered recycling depot     Drop-off depot for rural households	Direct employment gains, primarily in low skill jobs, are likely in recycling industries and in recycling collection. Indirect effects could include both short and long-term changes in secondary and tertiary employment. Magnitude, timing and direction is uncertain. As recycling becomes more centralized the recycling industries may become more specialized and centralized. Employment opportunities may occur only at one location in the GTA or elsewhere in North America.	A transition to conserver attitudes has major implications for the economy and employees. While many persons in society will adapt casily to changes, others will not. Mitigation is likely to occur as the economy readjusts to 3ks management. There should be a partnership between government, business and labour to facilitate this change in attitude. Education and re-training will be key components to help the working population adapt to new and evolving sectors in the "green" economy.	Direct employment gains, primarily in low skill jobs, are likely in recycling industries and in recycling collection. Indirect effects could include both short and long-term changes in secondary and tertiary employment. Magnitude, timing and direction is uncertain. As recycling becomes more centralized the recycling industries may become more specialized and centralized. Employment opportunities may occur only at one location in the CTA or elsewhere in North America.  Mitigation should enhance benefits.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Leaf and Yard Waste Collection			
Curbside collection of leaf and yard     waste     Drop-off depot for leaf and yard waste	. No effect	· Mitigation not required	· No effect
Residential Household Composting			
Door-to-door distribution of backyard composters to 80% of single family	Direct employment gains, primarily in . A transition to conserver attitudes low skill jobs, are likely in the	A transition to conserver attitudes has major implications for the	Direct employment gains, primarily in low skill jobs, are likely in the
households Targe 3-bin composting units	manufacturing of composters, and in the management of the program.	economy and employees. While many persons in society will adapt	manufacturing of composters, and in the management of the program.
distributed to apartment and co-	Magnitude, timing and direction of	easily to these changes, many will	Magnitude, timing and direction of
operative nousing complexes  Vermi-composting for multi-family	could include both short and long	not. Mittigation is likely to occur as the economy readjusts to 3Rs	could include both short and long
households	term changes in secondary and	management. There should be a	term changes in secondary and
	tertiary employment.	partnership between government,	tertiary employment.
		change in attitude. Education and	
		re-training will be key components	
		to help the working population	
		adapt to new and evolving sectors	
		in the "green" economy.	

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Other Residential Waste Diversion (HHW, Toxic Taxi, Pilot Wet/Dry, White Goods Collection, White Goods Drop-Off, etc.)			
Special curbside collections of Christmas trees     Special and weekly curbside collections of white goods     Drop-off depois for white goods     Special curbside collection for bulky items     Permanent drop-off depot for HHW     Special HHW drop-off days     Toxic Taxi service     Mobile HHW depots	Minor direct employment effect in these programs. Indirect effects could include both short and long term changes in secondary and tertiary employment. Magnitude, timing and direction of effects is uncertain.	A transition to conserver attitudes has major implications for the economy and employees. While many persons in society will adapt easily to these changes, many will not. Mitigation is likely to occur as the economy readjusts to 3Rs management. There should be a partnership between government, business and tabour to facilitate this change in attitude. Education and re-training will be key components to help the working population adapt to new and evolving sectors in the "green" economy.	Minor direct employment effect in these programs. Indirect effects could include both short and long term changes in secondary and tertiary employment. Magnitude, timing and direction of effects is uncertain.
Composting Facilities			
Centralized windrow composting of leaf and yard waste     In-vessel composting of source separated organics     New mixed waste processing and composting facility	Direct employment, primarily in low skill jobs, at the composing facilities and in the management of the program. Indirect effects could include both short and long term changes in secondary and tertiary employment. Magnitude, timing and direction of effects is uncertain. Minor short-term increase in construction sector employment.	Mitigation not required	Direct employment, primarily in low skill jobs, at the composting facilities and in the management of the program. Indirect effects could include both short and long term changes in secondary and tertiary employment. Magnitude, timing and direction of effects is uncertain. Minor short-term increase in construction sector employment.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Reuse Centres and Activities			
Municipal reuse centre     Private reuse centre     Non-profit reuse centre     Charitable reuse centres     Food reuse organization     Special goods exchange days	Direct employment gains, primarily in low skill jobs, are likely at these centres. Indirect effects could include both short and long term changes in secondary and tertiary employment. Magnitude, timing and direction of effects is uncertain.	· Mitigation not required	Direct employment gains, primarily in low skill jobs, are likely at these centres. Indirect effects could include both short and long term changes in secondary and tertiary employment. Magnitude, timing and direction of effects is uncertain.
Public MRFs			
Processing centre for dry recyclables	Direct employment is likely to be maintained at the MRF's and in the management of the program. Indirect effects could include both short and long term changes in secondary and tertiary employment. Magnitude, timing and direction of effects is uncertain.  Minor short-term increase in construction sector employment.	Mitigation not required	Direct employment is likely to be maintained at the MRFs and in the management of the program.  Indirect effects could include both short and long term changes in secondary and tertiary employment. Magnitude, timing and direction of effects is uncertain.  Minor short-term increase in construction sector employment.
Residential Recycling Depots and Transfer Stations			
Drop-off depot for dry recyclables     Depots located at transfer stations	Direct employment gains, primarily in low skill jobs, are likely in haulage and in the management of the program. Indirect effects could include both short and long term changes in secondary and tertiary employment. Minor short-term increase in construction sector employment.	Mitigation not required	Direct employment gains, primarily in low skill jobs, are likely in haulage and in the management of the program. Indirect effects could include both short and long term changes in secondary and tertiary employment.  Minor short-term increase in construction sector employment.

Component Category/Components	Potential Effects.	Mitigation/Enhancement	Component Net Effects
Residential Promotion and Education			
Promotion/education program for source reduction/pre-cycling, reuse and recycling     3Rs promotion and education program     Consumer education program	Direct employment gains are likely in printing, production and distribution. Indirect effects could include both short and long term changes in secondary and tertiary employment. Magnitude, timing and direction of effects is uncertain.	has major implications for the economy and employees. While many persons in sectify will adapt easily to these changes, many will not. Mitigation is likely to occur as the economy readjusts to 3Rs management. There should be a partnership between government, business and labour to facilitate this change in attitude. Education and re-training will be key components to help the working population adapt to new and evolving sectors in the "green" economy.	Direct employment gains are likely in printing, production and distribution. Indirect effects could include both short and long term changes in secondary and tertiary employment. Magnitude, timing and direction of effects is uncertain.



### GENERIC COMPONENTS NET EFFECTS TABLE H6.7

MUNICIPALITY: GTA CRITERION: Potent

: GTA System : Residential Mixed Waste Processing : Potential For Broad Social Impact Indicator: Potential Effects on Economic Development

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal			-
Curbside Collection of residential garbage from single family dwellings     Collection of residential garbage from multi-family units     Self haul of garbage     Regional recycling legislation     Drop-off depot for rural households	. No effect	. Mitigation not required	· No effect
Residential Recycling and Collection			
Curbside collection of Blue Box materials Expanding curbside collection Collection of bins of recyclables from multi-family units Drop-off depot for multi-family residents not serviced by recycling Community recycling centres Recycling at all multi-family buildings of greater than 6 units Blue Box recycling mandated Engineered recycling mandated Engineered recycling depot Drop-off depot for rural households	Direct economic benefits are likely in recycling industries, and in recycling collection. Indirect economic effects could include both short and long-term changes in secondary and tertiary sectors. Magnitude, timing and direction is uncertain. Over the long-term, this initiative could lead to the development of marketable "green" systems, technologies, and products in the GTA (Mercer, 1993). Recycling in all multi-family buildings will increase the supply of recyclable material and should provide better support for recycling industries.	The economic base is shifting from manufacturing to a more service orientation. Along with this trend is the movement towards a "green" economy. This transition is being made by various companies and sectors. However, the long-term competitiveness of the region may be dependent on the others making the transition as well. Government, business, and environmental interests should work in partnership to facilitate this transition (eg. Roundtables on the Economy and Environment), and grasp the opportunities for marketing "green" systems and technologies nationally and internationally.	Direct economic benefits are likely in recycling industries, and in recycling collection. Indurect economic effects could include both short and long-term changes in secondary and tertiary sectors. Magnitude, timing and direction is uncertain. Over the long-term, this initiative could lead to the development of marketable "green" systems, technologies, and products in the GTA (Mercer, 1993). Mitigation to enhance benefits.  Recycling in all multi-family buildings will increase the supply of recyclable material and should provide better suport for
			recycling industries.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Leaf and Yard Waste Collection			
Curbside collection of leaf and yard waste  Drop-off depot for leaf and yard waste	. No effect	. Mitigation not required	. No effect
Residential Household Composting			
Door-to-door distribution of backyard composters to 80% of single family households Large 3-bin composting units distributed to apartment and cooperative housing complexes Vermi-composting for multi-family households	Minor direct economic benefits are likely in the manufacturing of composters, and in the management of the program. Indirect economic effects could include both short and long-term changes in secondary and tertiary sectors and cost savings from a reduction in landfill fees, due to reduced volumes. Magnitude, timing and direction of effects is uncertain. Over the long-term, this initiative could lead to the development of marketable "green" products in the GTA (Although the industries could locate elsewhere in North America).	· Mitigation not required	Minor direct economic benefits are likely in the manufacturing of composters, and in the management of the program. Indirect economic effects could include both short and long-term changes in secondary and tertiary sectors and cost savings from a reduction in landfill fees, due to reduced volumes. Magnitude, timing and direction of effects is uncertain.

# TABLE H6.7 GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY: GTA CRITERION: Potent

: GTA System : Residential Mixed Waste Processing : Potential For Broad Social Impact Indicator: Potential Effects on Economic Development

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal			
Curbside Collection of residential garbage from single family dwellings     Collection of residential garbage from multi-family units     Self haul of garbage selection.     Regional recycling legislation     Drop-off depot for rural households	· No effect	· Mitigation not required	. No effect
Residential Recycling and Collection			
Curbside collection of Blue Box materials Expanding curbside collection Collection of bins of recyclables from multi-family units Dop-off depot for multi-family residents not serviced by recycling Community recycling centres Recycling at all multi-family buildings of greater than 6 units Blue Box recycling mandated Engineered recycling depot Drop-off depot for rural households	Direct economic benefits are likely in recycling industries, and in recycling collection. Indirect economic effects could include both short and long-term changes in secondary and tertiary sectors. Magnitude, timing and direction is uncertain. Over the long-term, this initiative could lead to the development of marketable "green" systems, technologies, and products in the GTA (Mercer, 1993). Recycling in all multi-famity buildings will increase the supply of recyclable material and should provide better support for recycling industries.	The economic base is shifting from manufacturing to a more service orientation. Along with this trend is the movement towards a "green" economy. This transition is being made by various companies and sectors. However, the long-term competitiveness of the region may be dependent on the others making the transition as well. Government, business, and environmental interests should work in partnership to facilitate this transition (eg. Roundtables on the Economy and Environment), and grasp the opportunities for marketing "green" systems and technologies nationally.	Direct economic benefits are likely in recycling industries, and in recycling collection. Indirect economic effects could include both short and long-term changes in secondary and tertiary sectors. Magnitude, timing and direction is uncertain. Over the long-term, this initiative could lead to the development of marketable "green" systems, technologies, and products in the GTA (Mereer, 1993). Mitugation to enhance benefits.  Recycling in all multi-family buildings will increase the supply of recyclable material and should provide better support for provides.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Leaf and Yard Waste Collection			
Curbside collection of leaf and yard waste     Drop-off depot for leaf and yard waste	. No effect	Mitigation not required	. No effect
Residential Household Composting			
Door-to-door distribution of backyard composters to 80% of single family households Large 3-bin composting units distributed to apartment and cooperative housing complexes Vermi-composting for multi-family households	Minor direct economic benefits are likely in the manufacturing of composters, and in the management of the program. Indirect economic effects could include both short and long-term changes in secondary and tertiary sectors and cost savings from a reduction in landfill fees, due to reduced volumes. Magnitude, timing and direction of effects is uncertain. Over the long-term, this initiative could lead to the development of marketable "green" products in the GTA (Although the industries could locate elsewhere in North America).	Mitigation not required	Minor direct economic benefits are likely in the manufacturing of compositers, and in the management of the program. Indirect economic effects could include both short and long-term changes in secondary and tertiary sectors and cost savings from a reduction in landfull fees, due to reduced volumes. Magnitude, timing and direction of effects is uncertain.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Other Residential Waste Diversion (HHW, Toxic Taxi, Pilot Wet/Dry, White Goods Collection, White Goods Drop-Off,			
etc.)			
Special curbside collections of	ikely in recycling industries and in	manufacturing to a more service	Minor direct economic benefits
Christmas trees	collection. Indirect economic effects	orientation. Along with this trend is	and in collection. Indirect
· Special and weekly curbside collections	could include both short and long-	the movement towards a "green"	economic effects could include
of white goods	term changes in secondary and	economy. This transition is being	both short and long-term changes
<ul> <li>Drop-off depots for white goods</li> </ul>	tertiary sectors and cost savings from	made by various companies and	in secondary and tertiary sectors.
<ul> <li>Special curbside collection for bulky</li> </ul>	a reduction in landfill fees, due to	sectors. However, the long-term	Magnitude, timing and direction of
items	reduced volumes. Magnitude, timing	competitiveness of the region may be	effects is uncertain.
· Permanent drop-off depot for HHW	and direction of effects is uncertain.	dependent on the others making the	
· Special HHW drop-off days	Over the long-term, this initiative	transition as well. Government,	
· Toxic Taxi service	could lead to the development of	business, and environmental interests	
· Mobile HHW depots	marketable "green" systems,	should work in partnership to	
	technologies, and products in the	facilitate this transition (eg.	
	GTA (Lesnicki and Mercer, 1993).	Roundtables on the Economy and	
		Environment), and grasp the	
		opportunities for marketing "green"	
		systems and technologies nationally	
		and internationally.	

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilties  Centralized windrow composting of leaf and yard waste In-vessel composting of source separated organics New mixed waste processing and composting facility	Direct economic benefits at these facilities. Indirect economic effects could include both short and long-term changes in secondary and terriary sectors. Magnitude, tuming and direction is uncertain. Over the long-term, this initiative could lead to the development of marketable "green" systems, technologies, and products in the GTA (Mercer, 1993).	Mitigation not required	Direct economic benefits at these facilities. Indirect economic effects could include both short and long-term changes in secondary and tertiary sectors. Magnitude, timing and direction is uncertain. Over the long-term, this initiative could lead to the development of marketable "green" systems, technologies, and products in the GTA (Mercer, 1993).
Reuse Centres and Activities  Municipal reuse centre  Private reuse centre  Non-profit reuse centre  Charliable reuse centres  Food reuse organization  Special goods exchange days	Minor direct economic benefits are likely at these centres. Indirect economic effects could include both short and long-term changes in secondary and tertiary sectors. Magnitude, timing and direction of effects is uncertain. For example, decreased demand for new products. Over the long-term, this initiative could lead to a viable purchasing option for certain SES groups in the GTA.	· Mitigation not required	Minor direct economic benefits are likely at these centres. Indirect economic effects could include both short and long-term changes in secondary and tertiary sectors. Magnitude, timing and direction of effects is uncertain.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Public MRFs			
· Processing centre for dry recyclables	Provides the infrastructural support for recycling materials by the private and public sector.     Provides a minor economic benefit in the construction sector.	manufacturing to a more service orientation. Along with this trend is the movement towards a "green" economy. This transition is being made by various companies and sectors. However, the long-term competitiveness of the region may be dependent on the others making the transition as well. Government, business, and environment interests should work in partnership to tacilitate this transition (eg. Roundrables on the Fronomy and Environment), and grasp the opportunities for marketing "green" systems and technologies nationally and internationally.	Inducet effect on economic development by providing the infrastructure required for recycling by the private and public sectors.  Provides a minor economic benefit in the construction sector.
Residential Recycling Depots and Transfer Stations			
Drop-off depot for dry resyclables  Depots located at transfer stations	Provides the infrastructural support for recycling materials by the private and public sector.  Provides a minor economic benefit in the sector.	· Mitigation not required	Provides a minor short term economic benefit in the construction sector. Indirect effect on economic development by providing the infrastructure required for recycling by the private and public sectors.

Component Category/Components Potential Effects	Offects	Mitigation/Enhancement	Component Net Effects
on 	Minor direct economic benefits in printing, production and distribution. Indirect economic effects could include both short and long-term changes in secondary and terriary sectors. Magnitude, timing and direction of effects is uncertain.	· Mitigation not required	Minor direct economic benefits in printing, production and distribution. Indirect economic effects could include both short and long-term changes in secondary and tertiary sectors. Magnitude, timing and direction of effects is uncertain.

#### BSLOPE

### GENERIC COMPONENTS NET EFFECTS TABLE H6.8

MUNICIPALITY: GTA CRITERION

: Potential For Broad Social Impact

System : Residential Mixed Waste Processing

Indicator: Potential Operational Effects on Institutions, Commercial Enterprises and Industries

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal			
Curbside Collection of residential garbage from single family dwellings     Collection of residential garbage from multifamily units     Self haul of garbage     Regional recycling legislation     Drop-off depot for rural households	. No effect	Mitigation not required	. No effect
Residential Recycling and Collection			
Curbside collection of Blue Box materials Expanding curbside collection Collection of bins of recyclables from multifamily units Drop-off depot for multi-family residents not serviced by recycling centres Community recycling centres Recycling at all multi-family buildings of greater than 6 units Blue Box recycling mandated Engineered recycling depoi	All landlords may be required to provide space, facilities and staff time to accommodate recycling and may incur additional costs.	Landlords may need to include additional costs for recycling in annual rent review application.	· Potential increase in costs for tenants and landlords.
Residential Leaf and Yard Waste Collection			
Curbside collection of leaf and yard waste     Drop-off depot for leaf and yard waste	. No effect	· Mitigation not required	· No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting			
Door-to-door distribution of backyard composters to 80% of single family households     Large 3-bin composting units distributed to apartment and co-operative housing complexes     Vermi-composting for multi-family households	<ul> <li>Landlords may be required to provide space and equipment for composters and may experience increased costs associated with insect and rodent control, staff etc.</li> </ul>	Province to consider increase in costs associated with composting services in annual rent review applications	. No effect
Other Residential Waste Diversion (IIIIW, Toxic Taxi, Pilot Wet/Dry, White Goods Collection, White Goods Drop-Off, etc.)			
Special curbside collections of Christmas trees     Special and weekly curbside collections of white goods     Drop-off depots for white goods     Special curbside collection for bulky items     Permanent drop-off depot for HHW     Special IHW drop-off days     Toxie Taxi service     Mobile HHW depots	The efficiency (or ease) of white goods disposal may have an effect on the sale of white goods (customers may want vendors to take back their old products).  Because of the increasing inconvenience to consumers in disposing of old appliances/furniture, etc., they may start looking for, and there may be a growing market for, products which are smaller and more durable.	Retail stores could develop buyback programs for large and bulky items. The consumer would then not be required to disperse items.	In the long term institutions and commercial enterprises may develop programs to "buy back" used white goods.
Composting Facilities			
Centralized windrow composting of leaf and yard waste     In-vessel composting of source separated organics     New mixed waste processing and composting facility	. No effect	· Mitigation not required	. No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Reuse Centres and Activities			
Municipal reuse centre     Private reuse centre     Non-profit reuse centre	· No effect	· Mitigation not required	. No effect
Charitable reuse centres     Food reuse organization     Special goods exchange days	*		
Public MRFs			
· Processing centre for dry recyclables	. No effect	· Mitigation not required	. No effect
Residential Recycling Depots and Transfer Stations			
Drop-off depot for dry recyclables Depots located at transfer stations	. No effect	Mitigation not required	. No effcei
Residential Promotion and Education			
Promotion/education program for source reduction/pre-cycling, reuse and recycling     3Rs promotion and education program     Consumer education program	· No effect	· Mitigation not required	. No effect



#### DCB.SEE

### GENERIC COMPONENTS NET EFFECTS TABLE H6.9

MUNICIPALITY: GTA

CRITERION

: Distribution of Social Costs and Benefits

System : Residential Mixed Waste Processing Indicator: Distribution of Socio-Economic Effects on Industry and Population Groups

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal			
Curbside Collection of residential garbage from single family dwellings     Collection of residential garbage from multi-family units     Self haul of garbage     Regional recycling legislation     Drop-off depot for rural households	· No effect	Mitgation not required	· No effect
Residential Recycling and Collection			
Curbside collection of Blue Box materials Expanding curbside collection Collection of bins of recyclables from multi-family units Drop-off depot for multi-family residents not serviced by recycling Community recycling centres Recycling at all multi-family buildings of greater than 6 units Blue Box recycling mandated Engineered recycling depot	. No effect	. Mingation not required	. No effect
Drop-oil depot for rural households			

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Leaf and Yard Waste Collection  · Curbside collection of leaf and yard waste · Drop-off depot for leaf and yard waste	. No effect	· Mitigation not required	· No effect
Residential Household Composting  Door-to-door distribution of backyard composters to 80% of single family households  Large 3-bin composting units distributed to apartment and co-operative housing complexes  Vermi-composting for multi-family households	. No effect	Mitigation not required	. No effect
Other Residential Waste Diversion (HIIW, Toxic Taxi, Pilot Wet(Dry, White Goods Collection, White Goods Drop-Off, etc.)  Special curbside collections of Christmas trees  Special and weekly curbside collections of white goods  Drop-off depois for white goods  Special curbside collection for bulky items  Permanent drop-off depot for HHW  Special HHW drop-off days  Toxic Taxi service  Mobile HHW depois	Residents of some municipalities are provided with white goods and HHW collection, while others are not.	Mitigation not required	Minor effect in different level of service for white goods and HHW collection in some municipalities.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities			
Centralized windrow composting of leaf and yard waste     In-wessel composting of source separated organics     New mixed waste processing and composting facility	Local residents and businesses may receive nuisance effects related to composting for all region residents.	<ul> <li>Site the composting facility in a non-residential area and away from sensitive industry and committed uses.     Develop appropriate mitigation/compensation for site related impacts.     Address equity issue aspect of the siting process.</li> </ul>	<ul> <li>Negative distribution effect on some local communities, population groups and industries.</li> </ul>
Reuse Centres and Activities			
Municipal reuse centre Private reuse centre Non-profit reuse centre Charitable reuse centres Food reuse organization Special goods exchange days	<ul> <li>Positive effect for lower income groups as more low cost items available and adds potential market for their goods.</li> </ul>	Miligation not required	Positive effect for lower income groups as more low cost items available and adds potential market for their goods.
Public MRFs			
· Processing centre for dry recyclables	Potential negative distribution effects on some groups living near the facility.	<ul> <li>Mitigation as "Potential Effects on Residents"</li> </ul>	<ul> <li>Potential negative distribution effects on some groups living near the facility.</li> </ul>
Residential Recycling Depots and Transfer Stations			
Drop-off depot for dry recyclables     Depots located at transfer stations	Potential negative distribution effects on some groups living near the facility.	Mttigation as "Potential Effects on Residents"	Potential negative distribution effects on some groups living near the facility.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Promotion and Education			
Promotion/education program for source reduction/pre-cycling, reuse and recycling     3Rs promotion and education program     Consumer education program	· No effect	· Mitigation not required	· No effect

### GENERIC COMPONENTS NET EFFECTS TABLE H6.10

MUNICIPALITY: GTA

CRITERION

System: Residential Mixed Waste Processing Indicator: Distribution of Lifestyle Effects : Distribution of Social Costs and Benefits

Component Category/ Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal			
Curbside Collection of residential garbage from single family dwellings     Collection of residential garbage from multi-family units in three streams     Self haul of garbage     Regional recycling [egislation     Drop-off depot for rural households	· No effect	· Mitigation not required	. No effect
Residential Recycling and Collection			
Curbside collection of Blue Box materials Expanding curbside collection Collection of bins of recyclables from multi-family units Drop-off depot for multi-family presidents not serviced by recycling Community recycling centres Recycling at all multi-family buildings of greater than 6 units Blue Box recycling mandated Engineered recycling depot Drop-off depot for rural households	Popular and environmentally beneficial, lifestyle affected throughout the region (Hay, ND; Environics, 1980). Minor difference in lifestyle effects in multifamily and fow density development.	Mitigation not required	Minor lifestyle distributional effect between multi-family and low density residents and rural and urban resident.

Component Category/ Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Leaf and Yard Waste Collection Curbside collection of leaf and yard waste Drop-off depot for leaf and yard waste	Residents of local municipalities without curbside collection may be required to make a greater change to lifestyle to reduce waste by either taking their leaf and yard waste to a facility or composting it at their residence.	· Mitigation not required	Residents of local municipalities without curbside collection may be required to make a greater change to lifestyle to reduce waste by either taking their leaf and yard waste to a facility or composting it at their residence.
Residential Household Composting  Door-to-door distribution of backyard composters to 80% of single family households  I arge 3-bin composting units distributed to apartment and co-operative housing complexes  Vermi-composting for multi-family households	· Equitable distribution of services.	Mitigation not required	· Equitable distribution of services.

Component Category/ Components	Potential Effects	Mitigation/Enhaocement	Component Net Effects
Other Residential Waste Diversion (HHW, Toxic Taxi, Pilot Wet/Dry, White Goods Collection, White Goods Drop-Off, etc.)			
Special curbside collections of Christmas trees     Special and weekly curbside collections of white goods     Drop-off depots for white goods     Special curbside collection for bulky items     Permanent drop-off depot for HIIW     Special HIIW drop-off days     Toxic Taxi service     Mobile HIW depots	· No effect	· Mitigation not required	. No effect
Composting Facilities  Centralized windrow composting of leaf and yard waste Inexest composting of source	· No cffect	· Mitigation not required	- No esfect
New mixed waste processing and composting facility			
Reuse Centres and Activities	No office	Militarios sos sociosismos	. No affice
munincipal reuse centre Non-profit reuse centre Charitable reuse centres Food reuse organization Special goods exchange days	No cirect	Mingaron not required	

Component Category/ Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Public MRFs			
Processing centre for dry recyclables	. No effect	· Mitigation not required	· No effect
Residential Recycling Depots and Transfer Stations			
<ul> <li>Drop-off depot for dry recyclables</li> <li>Depots located at transfer stations</li> </ul>	. No effect noted	· Mitigation not required	· No effect
Residential Promotion and Education			
Promotion/education program for source reduction/pre-cycling, reuse     and recogning.	· No effect	· Mitigation not required	· No effect
3Rs promotion and education			
program Consumer education program			

### TABLE H6.11 GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY: GTA

CRITERION

TECTA: Distribution of Social Costs and Benefits Indicator: Po

System: Residential Mixed Waste Processing Indicator: Potential Future Generation Effects of System

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal			
Curbside Collection of residential garbage from single family dwellings Collection of residential garbage from multi-family units Self haul of garbage Regional recycling legislation Drop-off depot for rural households	· No effect	· Mitigation not required	. No effect
Residential Recycling and Collection			
Curbside collection of Blue Box materials Expanding curbside collection Collection of bins of recyclables from multi-family units Drop-off depot for multi-family residents on serviced by recycling centres Community recycling centres Community recycling centres Recycling at all multi-family buildings of greater than 6 units Blue Box recycling mandated Drop-off depot for rural households	Costly to start-up and to establish because of market development, but over the long run this initiative could lead to a greater rationalization of resources and conservation of recological capital.  This could help maintain the availability of resources for the use/enjoyment of future generations.	Continue to promote and educate on 3Rs (Hay, ND; Lesneki, 1993; Morgan-Fraser, 1993; Watson, 1993). The likely over-all benefit to future generations needs to be emphasized in promoting these programs. It needs to be stressed that this generation is willing to make some sacrifices to ensure the future prosperity of their children/grandchildren.	Positive effect through more sustainable use of resources and conservation of the environment for future use/enjoyment.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Leaf and Yard Waste Collection			
Curbside collection of leaf and yard waste  Drop-off depot for leaf and yard waste	Costly to start-up and establish but may have environmental benefits in the long run. Uncertain (may be better to have the yard waste composted at the household, e.g., mutch leaves and grass branches) (Lesnicki, 1993).	Evaluate the best approach to management of leaf and yard waste. Address residential on- site mulching, chipping and composting. Could reduce the need for collection costs and costs for large, centralized facilities in the long term and may poss on the future generation a better process, so less facility management/decommissioning cost.	. Long term effect uncertain.
Residential Household Composting  Door-to-door distribution of backyard composters to 80% of single family households  Large 3-bin composting units distributed to apartment and co-operative housing complexes  Vermi-composting for multi-family households	Moderately costly to start-up and establish but environmentally beneficial in the long run. Should support change in behaviour to reduction and reuse.	Promotion and education should increase future participation.	Positive effect of passing on a healthier environment with resources more available through support for change in behaviour to reduction and reuse.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Other Residential Waste Diversion (IIIIW, Toxic Taxi, Pilot Wet(Dry, White Goods Collection, White Goods Drop-Off, etc.)  Special curbside collections of Christmas trees  Special and weekly curbside collections of white goods  Drop-off depots for white goods  Drop-off depots for white goods  Special curbside collection for bulky items  Permanent drop-off depot for IIIIW  Special IIIW drop-off days  Toxic Taxi service  Mobile IIIIW depots	Positive effect of providing a cleaner environment for the future through support for change in behaviour to repair, reuse and proper disposal.	Mitigation not required	Positive effect of providing a cleaner environment for the future through support for change in behaviour to repair, reuse and proper disposal.
Composting Facilities  Centralized windrow composting of leaf and yard waste In-vessel composting of source separated organies  New mixed waste processing and composting facility	Costly to start-up and establish but environmentally and possibly economically beneficial in the long run.	Evaluate the best approach to management of leaf and yard waste. Address residential on- site mulching, chipping and composting. Could reduce the need for collection costs and costs for large, centralized facilities in the long term.	· Minor positive future generational effects.
Reuse Centres and Activities  Municipal reuse centre  Private reuse centre  Non-profit reuse centre  Charitable reuse centres  Food reuse organization  Special goods exchange days	Should encourage/support repair and reuse of white goods ette, reduce the use of resources for manufacture of new products, leaving natural resources for the future.	Province to consider removing     Provincial Sales Tax or other     provincial taxes for the sale of used     goods.	<ul> <li>Positive effect through the support for repaired reuse of goxd, and subsequent reduction of resource use.</li> </ul>

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Public MRFs  Processing centre for dry recyclables	Costly to start-up and establish because of market development, but environmentally and possibly economically beneficial in the long run. Current generation paying the cost for altering behaviour to a more sustainable society. Required support for recycling.	Mitigation not required	Positive effect as the current generation is paying the cost for changing to more sustainable behaviour, which should leave future generations with cleaner environment and more resources available.
Residential Recycling Depots and Transfer Stations  Drop-off depot for dry recyclable  Depots located at transfer stations	Costly to start-up but environmentally and possibly economically beneficial in the long run.  Current generation behaviour paying cost for altering behaviour to a more sustainable society.	· Mitigation not required	Positive effect as the current generation is paying the cost for changing to more sustainable behaviour which should leave future generations with cleaner environment and more resources, available.
Residential Promotion and Education  Promotion/education program for source reduction/pre-cycling, reuse and recycling.  3Rs promotion and education program	Should have positive effects in changing current attitudes and behaviours to a more sustainable society which should leave future generations with cleaner environment and more resources available.	Education material could emphasize the benefits to future generation of 3Rs actions today.	Positive effects in changing current attitudes and behaviour to a more sustainable society which should leave future generations with cleaner environment and more resources available.

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### GENERIC COMPONENTS NET EFFECTS TABLE H7.1

MUNICIPALITY: GTA CRITERION: Social

: Social Acceptability

System: Residential Existing Individuals, Municipalities, IC&I Sector, Special and Sensitive Groups

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal			
Curbside collection of residential garbage from single family dwellings     Collection of residential garbage from multi-family units     Self haul of garbage	· No effect	· Mitigation not required	· No effect
Residential Recycling and Collection			
Curbside collection of Blue Box materials  Expanding curbside collection Collection of bins of recyclables from multi-family units Drop-off depot for multi-family residents not serviced by recycling  Drop-off depot for rural households	High participation rates but vary with municipality (Environes, 1990; Hay,ND) Greatest participation by single family residences (Gale, 1990) (Environes, 1990)(Hay,ND) Some groups (eg, lower SES) and households less acceptingwilling to participate (Lansana, 1992; Howenstine, 1993; Everett et al, 1992)(Environies, 1990)(Hay, ND) Participation may be limited by a lack of opportunities for multi-family residents (less participation by high rise, high and medium density multi-family contractions.	Additional measures (eg. block- leader approaches) may be needed to involve different ethnicities and lower Si's groups. (Bagby, Diangson and Patterson, 1992; Brun, 1991; Everett et al, 1992; Howenstine, 1993; Lansana, 1991; Hager, 1992) Modify program as required to address concerns of elderly (Bagby, 1993)	Participation may be limited by a lack of opportunities for multifamily residents (less participation by high rise, high and medium density multi-family buildings)

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Leaf and Yard Waste Collection			
Curbside collection of leaf and yard waste     Drop-off depot for leaf and yard waste	<ul> <li>General acceptance of the collection although there is some confusion for the resident on how/when to place yard waste for pick up</li> </ul>	<ul> <li>Spring, Summer, and Fall reminders to low density residences and apartment superintendents</li> </ul>	. No effect
Residential Household Composting			
Backyard composter distribution programs     Large 3-bin composting units distributed to apartment and co-	<ul> <li>Residential composting participation is possible with those who have the facilities (Environics, 1990). It may be limited to physically mobile</li> </ul>	Continue subsidies of units, provide home delivery and provide multi-lingual instruction for household composters	Participation by those who have backyards
operative housing complexes	people with yard space. A high proportion of those with backyard composters use them.		
Other Residential Waste Diversion (HHW, Toxic Taxi, Pilot Wet/Dry, White Goods Collection, White Goods Drop-Off, etc)			
Special curbside collections of Christmas trees     Special and weekly curbside collections of white goods     Drop-off depots for white goods     Special curbside collection for bulky items	Residents of municipalities without white goods collection may not be willing/able to drop off white goods Greater participation by individuals in pick up services (eg, toxic taxis, mobile HHW depots, white goods collection)	Provide call in pick up service for white goods and bulky items	Increased participation by individuals; higher cost for municipalities for 3Rs
Special HHW drop-off days     Toxic Taxi service     Mobile HHW depots			

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities  Centralized windrow composting of leaf and yard waste In-vessel composting of source separated organics Community Composting	No effect	· Mitigation not required	· No effect
Reuse Centres and Activities  . Municipal reuse centre Private reuse centre Non-profit reuse centre Charitable reuse centres Food reuse organization Special goods exchange days	In short term, increasing awareness of availability of reusable goods     Longer term demand for goals uncertain	Support with promotion/education program emphasizing the benefits of reuse     Province to consider tax reduction (sales or income tax) for the purchase of used goods	Short term growth in shopping at reuse centres. Longer term uncertain.
Public MRFs  Processing centre for dry recyclables	. No effect	· Mitigation not required	No effect
Residential Recycling Depots and Transfer Stations  Drop-off depot for dry recyclable  Depots located at transfer stations/landfills	· No effect	· Mitigation not required	. No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Promotion and Education			
3Rs promotion and education program	Generally acceptable and important	· Expand and refine	· Potentially positive effect through
· Consumer education program	to maintaining and increasing	promotion/education programs as	increased participation in 3Rs
-	participation Indications from	required based on changing	activities
	response to hot lines, etc is that	demographics, ethnic/language	
	people want more information	groups (Bagby, Diangson, and	
	(Environics, 1990; Watson, 1993)	Patterson, 1992)	
		<ul> <li>Promotional/Education programs</li> </ul>	
		should be based on the successful	
		programs identified in the 3Rs	
		literature (Folz and Hazlett, 1990)	
		For example, pamphlets & brochures	
		(in utility bills, etc) and community	
		information meetings	
		<ul> <li>The role of the schools could be</li> </ul>	
		critical, particularly for new	
		Canadians whose children are	
		receiving the only English instruction	
		in the family Many school boards	
		have environmental education	
		committees and the schools are	
		increasingly being led by Principals	
		and Vice-Principals with an	
		environmental message	

### GENERIC COMPONENTS NET EFFECTS TABLE H7.2

: Social Acceptability MUNICIPALITY: GTA CRITERION

System: Residential Existing Indicator: Attitudes and perception to 3Rs Activities

Components Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal			
Curbside collection of residential garbage from single family dwellings     Collection of residential garbage from multi-family units     Self haul of garbage	· No effect	· Mittgation not required	. No effect
Residential Recycling and Collection			
Curbside collection of Blue Box materials     Expanding curbside collection     Collection of bins of recyclables from multi-family units     Drop-off depot for multi-family residents not serviced by recycling     Drop-off depot for rural households	Acceptable for low density development provided source separation and pick-up, etc. is understood and convenient	Continue to support with promotion/education programs     Ensure convenience of system to maintain positive attitudes.     Programs designed for specific community groups (i.e. sensitive to ethnic and language diversity) may lead to more positive attitudes.	Positive effect by maintaining or increasing positive attitudes to 3Rs.
Residential Leaf and Yard Waste Collection			
Curbside collection of leaf and yard waste     Drop-off depot for leaf and yard waste	<ul> <li>General acceptance of the collection, although there is some for the resident on how/when to place yard waste for pick up</li> </ul>	<ul> <li>Spring, summer and fall reminders to low density residences and apartment superintendents.</li> </ul>	No effect, positive attitudes maintained.

Components Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting			
Backyard composter distribution programs     Large 3-bin composting units distributed     to apartment and co-operative housing     complexes	<ul> <li>Acceptable for single family households. Continued use and acceptance anticipated. Evidence of acceptance for multi-family residents uncertain.</li> </ul>	Positive attitudes towards composting will be enhanced, provided the nuisance concerns (see Broad Social Impact) are mitigated.	General growth in positive attitudes to 3Rs supported by household composting.
Other Residential Waste Diversion (HHW, Toxic Taxi, Pilot Wet/Dry, White Goods Collection, White Goods Drop-Off, etc.)			
Special curbside collections of Christmas trees  Special and weekly curbside collections of white goods  Drop-off depots for white goods  Special curbside collection for bulky items  Permanent drop-off depot for HHW  Special HHW drop-off days  Toxic Taxi service  Mobile HHW depots	IIIIW collection has a positive effect as social awareness is created about household hazardous waste.  Could be concerns regarding spills by the toxic taxis, but generally people are familiar with HIHW and accepting of its management.  Possible concerns about the costs of providing toxic taxi service and white goods collection; there may be more economical ways of managing the material.  Possible short-term concerns about reductions in white goods	Ensure public consultation and participation to address concerns related to HHW.	Potentially a positive attitudinal effect.
	collection		

Components Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities  · Centralized windrow composting of leaf and yard waste · In-vessel composting of source separated organics · Community Composting	Existing facilities are likely to become less favourable if odour and health issues are not resolved in the near term.     Greater environmental awareness among companies and employees practising composting (e.g. Campbells Soup).	Finsure public consultation and participation as part of the siting and monitoring process, and to address concerns related to existing composting facilities.	. No effect
Reuse Centres and Activities  Municipal reuse centre  Non-profit reuse centre  Charitable reuse centre  Charitable reuse centres  Foxd reuse organization  Special goods exchange days	Positive, public and municipal attitudes; socially and environmentally beneficial. Should reinforce positive attitudes to the 3Rs	· Mitigation not required	Positive effect by reinforcing positive attitudes to the 3Rs.
Public MRF's  Processing centre for dry recyclables	<ul> <li>Currently acceptable. Traffic, noise and litter issues may reduce the acceptability of some facilities, depending on location.</li> </ul>	· Address nuisance effects at existing facilities	. No effect
Residential Recycling Depots and Transfer Stations  Drop-off depot for dry recyclable  Depots located at transfer stations/landfills	<ul> <li>Encourages positive attitudes and perceptions that the individual/family can contribute to the solution.</li> </ul>	<ul> <li>Attitudes may be enhanced by informing residents as to the success of the program (Siebel, 1993)</li> </ul>	Positive effect; encourages positive attitudes and perceptions that the individual/family can contribute to the solution.

Components Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Promotion and Education			
3Rs promotion and education program Consumer education program	Increase awareness of the need for and benefit of 3Rs. Will motivate people to participate.  Consumer education will promote changes in product design (clurable, repairable) and packaging (reduction and recyclable).	Increase awareness of the need for and benefit of 3Rs. Will motivate people to participate.  Consumer education will promote changes in product design (durable, repairable) and packaging (reduction and recyclable).	Increase awareness of the need for and benefits of 3Rs. Will motivate people to participate. Consumer education will promote changes in shopping for changes in product design (durable, repairable) and packaging (reduction and recycle).

# TABLE H7.3 GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY: GTA
CRITERION: Social Acceptability

System: Residential Existing Indicator: Willingness to Pay

Component Category/Components	Potential Effects	Mitigatlon/Enhancement	Component Net Effects
Garbage Collection and Disposal  Curbside collection of residential garbage from single family dwellings Collection of residential garbage from multifamily units Self haul of garbage	· No effect	· Mitigation not required	· No effect
Residential Recycling and Collection  Curbside collection of Blue Box materials Expanding eurbside collection Collection of bins of recyclables from multifamily units Drop-off depot for multi-family residents not serviced by recycling Drop-off depot for rural households	Residents and muncipalities are willing to pay part of the cost of operating the collection system.	· Mitigation not required	Residents and municipalities are willing to pay part of the cost of operating the collection system.
Residential Leaf and Yard Waste Collection  Curbside collection of leaf and yard waste  Drop-off depot for leaf and yard waste	Additional costs appear acceptable to residents. Future questions on the necessity for this service are likely to arise.	· Mitigation not required	<ul> <li>Possible future concerns about the cost of leaf and yard waste collection and composting.</li> </ul>

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting  · Backyard composter distribution programs  · Large 3-bin composting units distributed to apartment and co-operative housing complexes	A proportion of residents in each municipality are willing to pay one-third the cost of backyard compositers and appear willing to accept municipal expenditures for education/promotion. Uncertain of acceptance of higher cost.	- Mitigation not required.	Residents likely willing to pay for subsidized composters and to purchase used goods.
Other Residential Waste Diversion (HHW, Toxic Taxi, Pilot We/Dry, White Goods Collection, White Goods Drop-Off, etc.)  Special curbside collections of Christmas trees  Special and weekly curbside collections of white goods  Drop-off depots for white goods  Special curbside collection for bulky items  Special curbside collection for HHW  Special HHW drop-off days  Toxic Taxi service  Mobile HHW depots	Uncertain of the willingness of municipalities to pay for white goods and HHW collection.  Municipalities appear willing to pay for depots.	Region/Province to examine product stewardship for white goods Region/Province to examine effectiveness of HHW management, and examine possibilities for joint programs with private sector	Municipalities may be less willing to pay the cost of white goods and HHW pick up.
Composting Facilities  · Centralized windrow composting of leaf and yard waste · In-vessel composting of source separated organics · Community Composting	<ul> <li>Metro and residents continue to fund the leaf and yard waste composting facilities.</li> </ul>	Mitgation not required.	. No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Reuse Centres and Activities			
<ul> <li>Municipal reuse centre</li> <li>Private reuse centre</li> <li>Non-profit reuse centre</li> <li>Charitable reuse centres</li> <li>Food reuse organization</li> </ul>	<ul> <li>Some people are willing to purchase used goods. If centres become convenient and shopping experiences acceptable, more people may be willing to pay for</li> </ul>	· Mitigation not required	Some people are willing to purchase used goods. If centres become convenient and shopping experiences acceptable, more people may be willing to pay for
· Special goods exchange days	new items.		new items.
Public MRFs  Processing centre for dry recyclables	Local government and residents appear willing to pay for the facilities provided subsidies	· Continue subsidies	Local government and residents appear willing to pay for the facilities provided subsidies
Residential Recycling Depots and Transfer Stations			
Depots located at transfer stations/landfills	<ul> <li>Local government and residents appear willing to pay for the facilities provided subsidies continue.</li> </ul>	Continue subsidies	Local government and residents appear willing to pay for the facilities provided subsidies continue.
Residential Promotion and Education			
3Rs promotion and education program     Consumer education program	Local government and residents likely to continue to support this activity	Programs should be linked to a public consultation program to address the specific needs of each region.	Local government and residents likely to continue to support this activity.





### GENERIC COMPONENTS NET EFFECTS TABLE H8.1

MUNICIPALITY: GTA

: Social Acceptability CRITERION

System : Residential Existing/Committed

Indicator: Participation in 3R's by Individuals, Municipalities, IC&I Sector, Special and Sensitive Groups

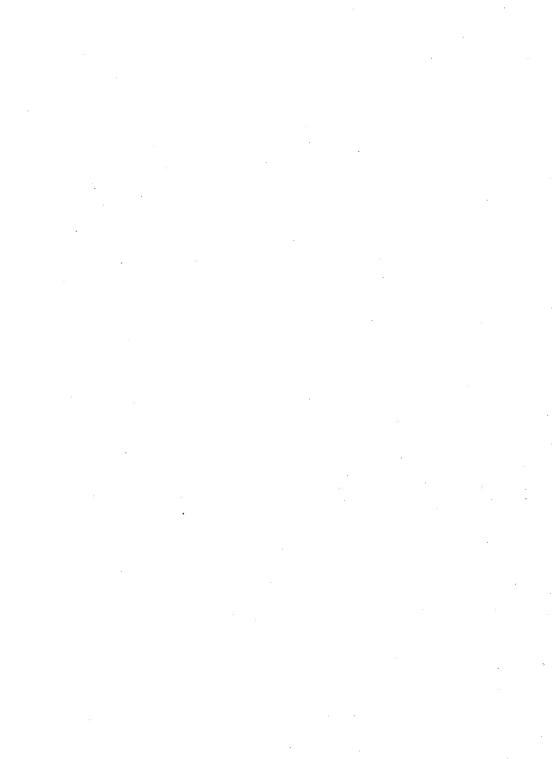
Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal			
Curbside Collection of residential garbage from single family dwellings     Collection of residential garbage from multi-family units     Self haul of garbage     Regional recycling legislation	. No effect	· Mitigation not required	· No effect

Residential Recycling and Collection  Curbside collection of Blue Box  Mith municipatit  Expanding curbside collection  1990, Hay,ND).		Mittgation/Ennancement	Component Net Effects
y y ling	High participation rates but vary with municipality (Environics, 1990; Hay,ND). Greatest participation by single family residences (Gale, 1990; Environics, 1990; Hay, ND). Some groups (e.g., lower SES) and households less acceptingwilling to participate (Lansana, 1992; Howenstine, 1992; Environics, 1990; Hay, ND). With an aging population, the elderly may have some difficulties in participating in the program. Will allow residents of multiple-family residences the opportunity to participate resulting in an overall increase in participation.	Expand recycling and collection service to multi-family buildings and provide at a minimum the same level of convenience as single-family residents. To encourage apartiment dwellers to participate use apartment committee and block volunteer approach (Bagby, 1993) and ensure distribution of clear information (Hager, 1992; Spaccarelli, 1990).  Work with apartment building owners/managers to develop most appropriate collection system (Von Mirbach, 1993; Hager, 1990).  Additional measures (e.g., block-leader approaches) may be needed to involve different ethnicities and lower SES groups (Bagby, Diangson and Patterson, 1992; Howenstine, 1993; Lansana, 1991; Hager, 1992).  Modily program as required to address concerns of elderly (Bagby, 1993).	· Greater participation throughout residential sector with largest gains in multi-family groups.
Residential Leaf and Yard Waste  Collection  Curbside collection of leaf and yard  Drop-off depot for leaf and yard  waste  waste  Drop-off of leaf and yard  confusion for to how/when to p pick up.  Drop-off of leaf and yard  how/when to p pick up.  Drop-off of leaf and yard  now/when to p pick up.	General acceptance of the confusion for the resident on how/when to place yard waste for pick up.  Drop-off of leaf and yard waste unlikely on a large scale due to inconvenience.	Spring, Summer and Fall reminders to low density residences and apartment superintendents	General acceptable of collection Drop-off will not be undertaken by many.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects	
Residential Household Composting				
Backyard composter distribution programs  Large 3-bin composting units	Residential composting participation is possible with those who have the facilities (Environics,	<ul> <li>Continue subsidies of units, provide home delivery and provide multi-lingual instruction for household composters.</li> </ul>	Expanded household composting in low, medium and high density residential areas.	
distributed to apartment and co- operative housing complexes	1990). It may be limited to physically mobile people with yard space. A high proportion of these	Provide composting services for residents in multiple-family dwellings and support with promotion/education program.		
	with backyard composters use them. Participation in community composting is uncertain.	Support community compositing with strong education/framotion and back up with proper management and community involvement in operations.	-	
Other Residential Waste Diversion (HHW, Toxic Taxi, Pilot Wet/Dry, White Goods Collection, White Goods Drop-Off, etc.)				
Special curbside collections of Christmas trees	Residents of municipalities without white goods collection may not be	Provide call in pick up service for bulky items and white goods	Increased participation by individuals, higher cost for	
Special and weekly curbside collections of white goods Dron-off denots for white goods	willing/able to drop off white goods Greater participation by		municipalities for 3Rs.	
Special curbside collection for bulky items	individuals in pick-up services (eg. toxic taxis, mobile HHW depots.			
Permanent drop-off depot for HHW Special HHW drop-off days	white goods and bulky items			
Toxic Taxi service				
Mobile HHW depots				_

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities			
Centralized windrow composting of leaf and yard waste     In-vessel composting of source separated organics     Community composting	· No effect	· Mitigation not required	. No effect
Reuse Centres and Activities			
Municipal reuse centre     Private reuse centre     Non-profit reuse centre     Charitable reuse centres     Food reuse organization     Special goods exchange days	<ul> <li>In short term increasing awareness of availability of reusable goods.</li> <li>Longer term demand for used goods uncertain.</li> </ul>	<ul> <li>Support with promotion/education program emphasising the benefits of reuse.</li> <li>Province could consider tax reduction (sales or income tax) for the purchase of used goods.</li> </ul>	Short term growth in shopping at reuse centres. Longer term effect uncertain.
Public MRFs			
Processing centre for dry recyclables     Construct new MRF or     improve/expand existing MRFs	No effect	· Mitigation not required	. No effect
Residential Recycling Depots and Transfer Stations			
Drop-off depot for dry recyclable     Depots located at transfer stations/landfills	. No effect	· Mitigation not required	. No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Promotion and Education			
· 3Rs promotion and education	· Generally acceptable and	Expand and refine promotion/education	Potentially positive effect through
program	important to maintaining and	programs as required based on changing	increased participation in 3Rs
<ul> <li>Consumer education program</li> </ul>	increasing participation.	demographics, ethnic/language groups	activities
	Indications from response to hot	(Bagby, Diangson, and Patterson, 1992).	
	lines, etc. is that people want more	Promotion/Education programs should be	
	information (Environics, 1990;	based on the successful programs	
	Watson, 1993).	identified in the 3Rs literature (Folz and	
		Hazlett, 1990). For example, pamphlets	
•		& brochures (in utility bills, etc.) and	
		community information meetings.	
		<ul> <li>The role of the schools could be critical,</li> </ul>	
		particularly for new Canadians whose	
		children are receiving the only English	
		instruction in the family. Many school	
		boards have environmental education	
		committees and the schools are	
		increasingly being led by Principals and	
		Vice-Principals with an environmental	
		message.	



# TABLE H8.2 GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY: GTA CRITERION

: Social Acceptability

System: Residential Existing/Committed Indicator: Attitudes and perception to 3Rs Activities

Components Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal			
Curbside Collection of residential garbage from single family dwellings     Collection of residential garbage from multi-family units     Self haul of garbage	. No effect	· Mitigation not required	. No effect
Regional recycling legislation			
Residential Recycling and Collection			
· Curbside collection of Blue Box	· Potentially acceptable for low-density	Continue to support with	Positive effect by maintaining or
materials	development, provided source	promotion/education programs.	increasing positive attitudes to
Expanding curbside collection	separation and pick-up is understood	Ensure convenience of system to	3Rs.
multi-family units	and convenient.  Provision of recycling service to all	maintain positive attitudes.  Programs designed for specific	
· Drop-off depot for multi-family residents	apartments over 6 units will provide	community groups (i.e. sepsitive to	
not serviced by recycling	long term support for 3Rs and should	ethnic and language diversity) may	
· Community recycling centres	increase waste diversion.	lead to more positive attitudes.	
<ul> <li>Recycling at all multi-family buildings of</li> </ul>	<ul> <li>Positive attitude toward recycling in</li> </ul>		
greater than 6 units	multi-family buildings likely to be		
<ul> <li>Blue Box recycling mandated</li> </ul>	enhanced by allowing apartment		
· Fingineered recycling depot	owners/managers to choose the system		
<ul> <li>Drop-off depot for rural households</li> </ul>	for their building (Von Mirbach,		
	1993).		

Components Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Leaf and Yard Waste Collection			
<ul> <li>Curbside collection of leaf and yard waste</li> <li>Drop-off depot for leaf and yard waste</li> </ul>	General acceptance of the collection, although there is some confusion for the resident on how/when to place yard waste for pick up. May reduce the amount of back yard composting undertaken.  Unlikely that many residents will dropoff leaf and yard waste.	Spring, summer and fall reminders to low density residences and apartment superintendents.	· No effect
Residential Household Composting			
Backyard composter distribution programs     Large 3-bin composting units distributed to apartment and co-operative housing complexes	Acceptable for low density family households. Continued use and acceptance anticipated. Evidence of acceptance for multi-family residents uncertain.  Effects of community composting uncertain.	Positive attitudes towards composting will be enhanced, provided the nuisance concerns (see Broad Social Impact, Potential for Lifestyle changes) are mitigated.	Potential growth in positive attitudes to 3Rs supported by household composting. Potential for residents of multifamily households to object to composting if odour and insect problems occur.

Components Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Other Residential Waste Diversion (HHW, Toxic Taxi, Pilot Wet/Dry, White Goods Collection, White Goods Drop-Off, etc.)			
Special curbside collections of Christmas trees     Special and weekly curbside collections of white goods     Drop-off depois for white goods     Special curbside collection for bulky items     Permanent drop-off depoi for HHW     Special HHW drop-off days     Toxic Taxi service     Mobile HHW depois	HIIW collection and drop-off days have a positive effect as social awareness is retated about household hazardous waste.  Could be concerns regarding spills by the toxic taxi and mobile HIW depot, but generally people are familiar with HIIW and accepting of its management.  Possible concerns about the costs of providing toxic taxi service and white goods collection; there may be more economical ways of managing the material.  Possible short-term concerns about reductions in white goods collection.	Ensure public consultation and participation to address concerns related to HHIW.	· Potentially a positive attitudinal effect
Composting Facilities  Centralized windrow composting of leaf and yard waste Invessel composting of source separated organics Community composting	Existing facilities are likely to become less favourable if odour and health issues are not resolved in the near term.  Greater environmental awareness among companies and employees practising composting (e.g. Campbells Soup).	Ensure public consultation and participation as part of the sting and monitoring process, and to address concerns related to existing composting facilities.	· No effect

Components Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Reuse Centres and Activities			
· Municipal reuse centre · Private reuse centre	Positive, public and municipal attitudes; socially and environmentally	· Mitigation not required	Positive effect by reinforcing positive attitudes to the 3Rs
Non-profit reuse centre     Charitable reuse centres	beneficial. Should reinforce positive attitudes to the 3Rs.		
Food reuse organization  Special goods exchange days			
Public MRFs			
Processing centre for dry recyclables     Construct new MRF or improve/expand	· Currently acceptable. Traffic, noise and litter issues may reduce the	<ul> <li>Address nuisance effects at existing facilities</li> </ul>	· No effect
existing MRFs	acceptability of some facilities, depending on location.		
Residential Recycling Depots and Transfer Stations			
oldelanes the day seemelable	. Recourses positive attitudes and	· Attitudes may be enhanced by	· Positive effect: encourages positive
Depot located at transfer     stations/landfills	perceptions that the individual/family can contribute to the solution.	informing residents as to the success of the program (Siebel,	attitudes and perceptions that the individual/family can contribute to
		1993).	the solution.
Residential Promotion and Education			
3Rs promotion and education program     Consumer education program	Increase awareness of the need for and benefits of 3Rs. Will motivate	· Expand promotion and education programs	· Increase awareness of the need for and benefits of 3Rs. Will
001	people to participate.		motivate people to participate.
	Consumer education will promote		change in shopping for changes in
	product design (durable, repairable)		product design (durable,
	and packaging (reduction and	-	repairable) and packaging
	recyclable).		(וכמתרווסוו מוות וכרוזיוי).

### TABLE H8.3 GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY: GTA
CRITERION: Social Acc

: GTA System System System : Social Acceptability India

System: Residential Existing/Committed Indicator: Willingness to Pay

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal			
Curbside Collection of residential garbage from single family dwellings.     Collection of residential garbage from multi-family units.     Self haul of garbage     Regional recycling legislation.	· No effect	· Mitigation not required	. No effect
Residential Recycling and Collection			
Curbside collection of Blue Box materials  Expanding curbside collection Collection of bins of recyclables from multi-family units Drop-off depot for multi-family residents not serviced by recycling Community recycling centres Recycling at al multi-family buildings of greater than 6 units Blue Box recycling mandated Engineered recycling depot Drop-off depot for rural households	Residents and municipalities are probably willing to pay part of the cost of operating the collection system.  Uncertain if regions are willing to continue existing funding arrangements or willing to accept a reduction in subsidies.	Mitigation to include ongoing subsidies	Residents and municipalities are probably willing to pay part of the cost of operating the collection system.
Residential Leaf and Yard Waste Collection			
Curbside collection of leaf and yard waste     Drop-off depot for leaf and yard waste	Possible future concerns about the cost of leaf and yard waste collection and composting.	· Mitigation not required	<ul> <li>Possible future concerns about the cost of leaf and yard waste collection and composting.</li> </ul>

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting			
Backyard composter distribution program     Large 3-bin composting units	A proportion of residents in each municipality are willing to pay one-third the cost of backyard composters	<ul> <li>Support promotion of composting with education on benefits.</li> </ul>	A proportion of residents in each municipality are willing to pay one-third the cost of backyard
distributed to apartment and co- operative housing complexes	and appear willing to accept municipal expenditures for education/promotion. Uncertain of acceptance of higher cost, for composters or for those who have		composiers and appear witing to accept municipal expenditures for education/promotion. Uncertain of acceptance of higher cost, for composters or for those who have
	not purchased a composter.		not purchased a composter.
Other Residential Waste Diversion (HHW, Toxic Taxi, Pilot Wet/Dry, White Goods Collection, White Goods Drop-Off, etc.)			
Special curbside collections of Christmas trees     Special and weekly curbside collections of white goods	<ul> <li>Uncertain of the willingness of municipalities to pay for white goods and HHW collection. Willing to pay for depois.</li> </ul>	Region/Province to examine product stewardship for white goods. Region/Province to examine effectiveness of HHW management.	Municipalities may be less willing to pay the cost of white goods and HHW pick up.
Drop-off depots for white goods     Special curbside collection for bulky items		and examine possibilities for joint programs with private sector.	
Permanent drop-off depot for HHW     Special HHW drop-off days			
Toxic Taxi service Mobile HHW depots			

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities			
Centralized windrow composting of leaf and yard waste     In-vessel composting of source separated organics	Region and residents continue to fund the leaf and yard waste composting facilities. In the longer term the higher costs of locating and operating a composting facility may become an issue for some people.	<ul> <li>Education program to address the benefits and the need for composting facilities.</li> </ul>	Region and residents continue to fund the leaf and yard waste composing facilities. In the longer term the higher costs of locating and operating a composting facility may become an issue for some people.
Reuse Centres and Activities			
Municipal reuse centre Private reuse centre Non-profit reuse centre Charitable reuse centres Food reuse organization Special goods exchange days	Some people are willing to purchase used goods. If centres become convenient and shopping experiences acceptable, more people may be willing to pay for used items.	Mitigation not required	Some people are willing to purchase used goxds. If centres become convenient and shopping experiences acceptable, more people may be willing to pay for used items.
Public MRFs		,	
Processing centre for dry recyclables Construct new MRF or improve/expand existing MRFs	Local government and residents appear willing to pay for the facilities provided subsidies for programs continue.	Continue subsidies, government or private sector.	Local government and residents appear willing to pay for the facilities provided subsidies for programs continue.
Residential Recycling Depots and Transfer Stations			
Drop-off depot for dry recyclable     Depots located at transfer     stations/landfills	Local government and residents appear willing to pay for the facilities provided subsidies for programs continue.	Continue subsidies, government or private sector.	Local government and residents appear willing to pay for the facilities provided subsidies for programs continue.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Promotion and Education			
Consumer education program     Local government and residents likely     Consumer education program     to continue to support this activity     address the specific needs of each second to a specific need to a specific needs of each second to a specific n	Local government and residents likely to continue to support this activity	Programs should be linked to a public consultation program to address the specific needs of each	Local government and residents likely to continue to support this activity
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### GENERIC COMPONENTS NET EFFECTS TABLE H9.1

: Social Acceptability MUNICIPALITY: GTA CRITERION: Social

System : Residential Direct Cost Individuals, Municipalities, IC&I Sector, Special and Sensitive Groups

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal			
Direct Cost system for garbage	Recycling legislation forces participation	Promotion/education and public	In the short term, some individuals
collection	in the short term although some	consultation programs should help	and groups may not participate fully
· Curbside collection of residential	residents will not support it. In the	increase participation by individuals	in the direct cost system due to
garbage from single family	longer term likely to become	and special/sensitive groups over	initial opposition, although in the
dwellings	acceptable.	time.	longer term, participation is likely to
<ul> <li>Collection of residential garbage</li> </ul>	In the short term, some individuals and	Measure to provide relief from	increase.
from multi-family units	groups may not participate fully in the	increase costs for low income and	<ul> <li>Any type of direct cost system</li> </ul>
· Self haul of garbage	direct cost system due to initial	large households should be	implemented in a region where there
<ul> <li>Regional recycling legislation</li> </ul>	opposition, although in the longer term,	developed.	is a significant proportion of high-rise
	participation is likely to increase.	Cooperation in the region to share	buildings is likely to meet with mixed
	<ul> <li>Any type of direct cost system</li> </ul>	expertise and knowledge may remove	success. A direct cost system intends
	implemented in a region where there is	some implementation barriers.	to change waste management
	a significant proportion of high-rise		behaviour by adding an individual
	buildings is likely to meet with mixed		ceonomic incentive. The incentive
	success. A direct cost system intends to		generally does not exist in buildings
	change waste management behaviour by		of multiple units (Bagby, 1993),
	adding an individual economic incentive.		unless there is broadly-based
	The incentive generally does not exist in		cooperation.
	buildings of multiple units (Bagby,		· The administration and
	1993), unless there is broadly-based co-		implementation of direct cost might
	operation.		be complex and difficult, precluding
	· The administration and implementation		participation by some municipalities.
	of direct cost might be complex and		Cooperation in the region to share
	difficult, precluding participation by		expertise and knowledge may remove
	some municipalities.		some implementation barriers.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection			
Curbside collection of Blue Box materials     Expanding curbside collection     Collection of bins of recyclables. from multi-family units     Drop-off depot for multi-family residents not serviced by recycling Community recycling centres. Recycling at all multi-family buildings of greater than 6 units     Blue Box recycling mandated     Engineered recycling depot     Drop-off depot for rural     households	High participation rates but vary with municipality (Environes, 1990; Hay, ND). Greatest participation by single family residences (Gale, 1990; Environics, 1990; Hay, ND). Potentially some groups (e.g., lower SES) and households less accepting/willing to participate (Lansana, 1992; Howenstine, 1993; Evertt et al., 1992; Environics, 1990; Hay, ND). Potential for higher contamination rates of Blue Boxes as households place non-recyclables in Blue Box to reduce amount of garbage.	Expand recycling and collection service to multi-family buildings and provide at a minimum the same level of convenience as single-family residents. To encourage apartment dwellers to participate use apartment committee and block volunteer approach (Bagby, 1993) and ensure distribution of clear information (Hager, 1992; Spacearelli, 1980). Work with apartment building owners/managers to develop most appropriate collection system (Von Mirbach, 1993; Hager, 1980).  Additional measures (e.g., blockleader approaches) may be needed to involve different ethnicities and lower SES groups (Bagby, Diangson and Pauterson, 1992; Howenstine, 1993; Lansana, 1991; Hager, 1992).  Modify program as required to address concerns of elderly (Bagby, 1993).  Public education, consultation and design of the particular direct cost system will address many of the	Potential for higher contamination of Blue Box in the short term.
		concerns.	

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Leaf and Yard Waste Collection			
<ul> <li>Curbside collection of leaf and yard waste</li> <li>Drop-off depot for leaf and yard waste</li> </ul>	General acceptance of the collection although there is some confusion for the resident on how/when to place yard waste for pick up.     Drop-off of leaf and yard waste unlikely on a large scale due to inconvenience.	Spring, summer, and fall reminders to low density residences and apartment superintendents.	General acceptance of collection Drop-off will not be undertaken by many.
Residential Household Composting			
Door-to-door distribution of backyard composters to 80% of single family households Promotion of vermi-composters to multi-family units Large 3-bin composting units distributed to apartment and cooperative housing complexes	Residential composting participation is possible with those who have the facilities (Linvironies, 1990). It may be limited to physically mobile people with yard space. A high proportion of those with backyard composters use them.  Vermicomposting has not met with wide acceptance and appears to have low rates of participation.  Participation in community composting is uncertain.	Continue subsidies of units, provide home delivery and provide multi-lingual instruction for household composters. Support residents in multiple-family dwellings and support with promotion/education program and consultation program to define the best composting system for each building. Support community composting with strong education/promotion and back up with proper management and community involvement in operations.	Expanded participation household composing in low, medium and high density residential areas.  Increased participation likely.  Vermicompositing has not met with wide acceptance and appears to have low rates of participation.  Participation in community compositing is uncertain.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Other Residential Waste Diversion (HHW, Toxic Taxi, Pilot Wet/Dry, White Goods Collection, White Goods Drop-Off, etc.)	-	,	
Special curbside collections of Christmas trees     Special and weekly curbside collections of white goods     Drop-off depois for white goods     Special curbside collection for bulky items	Residents of muncipalities without white goods collection may not be willing/able to drop off white goods Greater participation by individuals in pick-up services (eg. toxic taxis, mobile HHW depots, white goods collection).	<ul> <li>Provide call in pick up service for white goods.</li> </ul>	<ul> <li>Increased participation by individuals; higher cost for municipalities for 3Rs.</li> </ul>
Permanent drop-off depot for HHW     Special HHW drop-off days     Toxic Taxi service     Mobite HHW depots			
Composting Facilities			
Centralized windrow composting of leaf and yard waste     In-vessel composting of source separated organics	. No effect	· Mitigation not required	. No effect
Reuse Centres and Activities			
Municipal reuse centre     Private reuse centre     Non-profit reuse centre     Charitable reuse centres     Food reuse organization     Special goods exchange days	In short term increasing awareness of availability of reusable goods. Longer term demand for used goods uncertain.	Support with promotion/education program emphasising the benefits of reuse.  Province to consider tax reduction (sales or income tax) for the purchase of used goods.	Short term growth in shipping at reuse centres. Longer term uncertain.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Public MRFs			
Processing centre for dry recyclables	. No effect	Mitigation not required	· No effect
· Construct new or improve/expand existing MRFs			
Residential Recycling Depots and Transfer Stations			
Drop-off depot for dry recyclable Depots located at transfer stations/landfilts	. No effect	· Mitigation not required	No effect

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Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Promotion and Education			
Promotion/education program on Direct Cost system Promotion/education program on	Generally acceptable and important to maintaining and increasing participation. Indications from response	Expand and refine programs as required based on changing	<ul> <li>Potentially positive effect through increased participation in 3Rs activities.</li> </ul>
source reduction/pre-cycling, reuse and recycling.	to hot lines, etc. is that people want more information (Environies, 1990; Watson, 1993; Morgan-Frazer, 1993;	demographics, ethnic/language groups (Bagby, Diangson, and Patterson, 1992).	
program Consumer education program	Lesnicki and Mercer, 1993; Foster, 1993).	Promotional/Education programs should be based on the successful	
		programs identified in the 3Rs	
		1990). For example, pamphlets &	
		brochures (in utility bills, etc.) and community information meetings.	
		. The role of the schools could be	
		critical, particularly for new Canadians whose children are	
		receiving the only English instruction	
		in the family. Many school boards	
		have environmental education	
		increasingly being led by Principals	
		and Vice-Principals with an	
		environmental message.	

## TABLE H9.2 GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY: GTA
CRITERION: Social Acceptability

System: Residential Direct Cost Indicator: Attitudes and perception to 3Rs Activities

Components Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal			
Direct Cost system for garbage	· Long term effects through increasing	Mitigation to include proper	· Long term effects through increasing
collection	awareness and support for 3Rs of	design of collection system for	awareness and support for 3Rs of
· Curbside collection of residential	regional recycling legislation.	apartment building owners,	regional recycling legislation.
garbage from single family dwellings	· Potential for multi-family households	managers, and dwellers.	· Potential for multi-family households to
· Collection of residential garbage from	to object to composting if odour, and	Public education and	object to composting if odour, and
multi-family units	insect problems occur.	consultation will be important	insect problems occur.
Self haul of garbage	Administration and monitoring may	to enhancing positive attitudes.	<ul> <li>Administration and monitoring may be</li> </ul>
<ul> <li>Regional recycling legislation</li> </ul>	be so complex that added to the	The householder should be	so complex that added to the collection
	collection costs, a direct cost system	shown how waste management	costs, a direct cost system may not be
	may not be worth the effort (Pollock,	costs are reduced on their	worth the effort (Pollock, 1993).
	1993).	property taxes.	<ul> <li>Initially, there will be some negative</li> </ul>
	· Initially, there will be some negative		attitudes on the part of the public to a
	attitudes on the part of the public to		direct cost system. It may be viewed by
	a direct cost system. It may be		the public as an additional "tax" on
	viewed by the public as an additional		citizens. This attitude may change by
	"tax" on citizens. This attitude may		implementing a direct cost system
	change by implementing a direct cost		designed specifically for Metropolitan
	system designed specifically for		Toronto. Public education and
	Metropolitan Toronto.		consultation will be important to
	In longer term, high participating		enhancing positive attitudes. The
	households may perceive a distinct		householder should be shown how
	financial advantage over lower		waste management costs are reduced
	participating households, increasing		on their property taxes.
	their enthusiasm for the initiative.		<ul> <li>In longer term, high participating</li> </ul>
			households may perceive a distinct
			financial advantage over lower
			participating households, increasing
			their enthusiasm for the initiative.

Components Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection			
Curbside collection of Blue Box materials  Expanding curbside collection  Collection of bins of recyclables from multi-family units  Drop-off depot for multi-family residents not serviced by recycling Community recycling centres  Recycling at all multi-family buildings of greater than 6 units  Blue Box recycling mandated  Engineered recycling mandated  Engineered recycling depoil  Drop-off depot for rural households	Acceptable for low-density development, provided source separation and pick-up is understood and convenent (Hager, 1992).  Drop-off for multi family and single family not as convenient but acceptance dependent on location and hours of operation of depot (Hager, 1992).  Provision of recycling service to all apartments over 6 units will provide long term support for 3Rs and should increase waste diversion (Hager, 1992).  Positive attitude toward recycling in multi-family buildings likely to be enhanced by allowing apartment owners/managers to choose system.	Continue to support with promotion/education programs. Finsure convenience of system to maintain positive attitudes. Programs designed for specific community groups (i.e. sensitive to ethnic and language diversity) may lead to more positive attitudes.	Postive effect by maintaining or increasing positive attitudes to 3Rs.  Positive attitude toward recycling in multi-family buildings likely to be enhanced by allowing apartment owners/managers to choose system.
Residential Leaf and Yard Waste Collection  Curbside collection of leaf and yard waste  Drop-off depot for leaf and yard waste	General acceptance of the collection, although there is some confusion for the resident on how/when to place yard waste for pick up. May reduce the amount of backyard composting undertaken.  Unlikely that many residents will drop-off leaf and yard waste.	Spring, summer and fall reminders to low density residences and apartment superintendents.	Could reduce the amount of composting of leaf and yard waste done on-site.

Residential Household Composting  Door-to-door distribution of backyard  composters to 80% of single family households			
	ow density family titinued use and apared. Evidence of nulti-family residents nicompositing has not n a large scale; nat it may not be long term. Immunity compositing lif-family residents to king if odour, insect terms and health	Provide promotion/education program and consultation program for multi-family residences.  Positive attitudes towards compositing will be enhanced, provided the nuisance concerns (see Broad Social Impact) are mitigated.	General growth in positive attitudes to 34ks supported by household composing.  Potential for multi-family residents to object to composting if odour, insect and rodent problems and health concerns persist.

Components Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Other Residential Waste Diversion (HHW, Toxic Taxi, Pilot Wet/Dry, White Goods Collection, White Goods Drop-Off, etc.)	,		
Special curbside collections of Christmas trees     Special and weekly curbside collections of white goxds     Drop-off depois for white goxds     Special curbside collection for bulky items     Permanent drop-off depot for HHW     Special HHW drop-off days     Toxic Taxi service     Mobile IIIIW depois	HHW collection and drop-off days have a positive effect as social awareness is created about household hazardous waste. Could be concerns regarding spills by the toxic taxi and mobile HHW depot, but generally people are familiar with IIHW and accepting of its management (Environics, 1990). Possible concerns about the costs of providing toxic taxi service and white goods collection; there may be more economical ways of managing the material (Lesnicki, 1993). Possible short-term concerns about reductions in white goods collection.	Ensure public consultation and participation to address concerns related to HHW.	Potentially a positive attitudinal effect
Composting Facilities  Centralized windrow composting of leaf and yard waste In-vessel composting of source separated organics	Existing facilities are likely to become less favourable if odour and health issues are not resolved in the near term.  Greater environmental awareness among companies and employees practising composting (e.g. Campbells Soup).	Ensure public consultation and participation as part of the sting and monitoring process, and to address concerns related to existing composting facilities.	No effect

Components Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Reuse Centres and Activities  Municipal reuse centre  Private reuse centre  Non-profit reuse centre  Charitable reuse centres  Food reuse organization  Special goods exchange days	Positive, public and municipal attitudes; socially and environmentally beneficial. Should reinforce positive attitudes to the 3Rs.	· Mitigation not required	<ul> <li>Positive effect by reinforcing positive attitudes to the 3Rs.</li> </ul>
Public MRFs  • Processing centre for dry recyclables  • Construct new or improve/expand existing MRFs	Currently acceptable. Traffic, noise and litter issues may reduce the acceptability of some facilities, depending on location.	Address nuisance effects at existing facilities	. No effect
Residential Recycling Depots and Transfer Stations  Drop-off depot for dry recyclable Depots located at transfer stations/landfills	Encourages positive attitudes and perceptions that the individual/family can contribute to the solution.	<ul> <li>Attitudes may be enhanced by informing residents as to the success of the program (Siebel, 1993).</li> </ul>	Positive effect; encourages positive attitudes and perceptions that the individual/family can contribute to the solution.
Residential Promotion and Education Promotion/education program on Direct Cost system Promotion/education program on source reduction/pre-cycling, reuse and recycling 3Rs promotion and education program Consumer education	Increase awareness of the need for and benefits of 3Rs. Will motivate people to participate (Morgan-Frazer, 1992, Lesnekt, 1993). Consumer education will promote change in shopping for changes in product design (durable, repairable) and packaging (reduction and recyclable).	Expand promotion and education programs.  Province to assist with cost and planning, if required.	Increase awareness of the need for and benefits of 3Rs. Will motivate people to participate.     Consumer education could promote change in shopping behaviour and demand for changes in product design (durable, repairable) and packaging (reduction and recycle).



## TABLE H9.3 GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY: GTA
CRITERION: Social Acceptate

' : GTA : Social Acceptability

System: Residential Direct Cost Indicator: Willingness to Pay

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal			
· Direct Cost system for earbage	Implementing a direct cost system in	Prior to the implementation of direct cost for	Initial opposition to increase
collection	multiple-family dwellings is difficult	garbage collection, local tax assessments	costs of collection of garbage
Curbside collection of residential	because of the lack of individual	should have a portion of the tax bill	without deerease of taxes.
garbage from single family	economic incentive to recycle	specifically designated for waste management	<ul> <li>Lower income households and</li> </ul>
dwellings	(difficult to identify who disposes of	or a specific waste management levy similar to	larger households may be
· Collection of residential garbage	the garbage). The apartment	the water and sewer fees. This tends to force	unable/unwilling to pay for
from multi-family units	owner/manager will be viewed by the	people to think about the costs of garbage	garbage collection.
Self haul of garbage	tenants as the beneficiary of their	and waste management. Following an	The costs to the municipality of
· Regional recycling legislation	recycling activity (Bagby, 1993).	adjustment period, people can more readily	a direct cost system may
	<ul> <li>Apartment owners may be unwillingly</li> </ul>	understand volume or weight-based rates	outweigh the benefits.
	to pay to provide recycling services to	direct cost systems (e.g. Seattle). Other	<ul> <li>After the phase-in period,</li> </ul>
	tenants.	important measures that mitigate the negative	households are fikely to realize
	· Generally accepted by residents	effects of a direct cost system include; the	the benefit of diverting their
	(Environcs, 1990).	provision of an expanded recycling program,	waste through lower costs.
	· Potential for the system to be seen as	leaf/yard waste coffection, backyard	
	a regressive tax system affecting	composters and HHW service, free or at	
	lower-income groups the most.	minimal costs; the organization of variable	
	<ul> <li>After the phase in period households</li> </ul>	rate systems to allow residents a variety of	
	are likely to realize the benefit of	choice in waste management service; an	
	diverting their waste through lower	enforcement section to deal with illegal	
	costs	dumping; and possibly rates for low-income	
		residences (equity concerns).	
		<ul> <li>Develop a direct cost and collection system</li> </ul>	
		that is appropriate for apartment households.	
		Provide incentives to apartment owners to	
		provide recycling services to tenants.	
		<ul> <li>Consider ways of easing the burden on lower</li> </ul>	
		income and large households for direct cost	
		garbage collection.	

Component Category/Components	Potential Effects	-Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection  Curbside collection of Blue Box materials  Expanding curbside collection Collection of bins of recyclables from multi-family units Drop-off depot for multi-family residents not serviced by recycling Community recycling centres Recycling at all multi-family buildings of greater than 6 units buildings of greater than 6 units Blue Box recycling depot Engineered recycling depot Drop-off depot for rural households	Residents and municipalities are willing to pay part of the cost of operating the collection system. Willingness of tenants and landlords to pay increased costs is uncertain.	The region could provide advice/audits to apartment owners on the best and lowest-cost recycling opportunities.	Willingness of tenants and landlords to pay increased costs is uncertain.
Residential Leaf and Yard Waste Collection Curbside collection of leaf and yard waste Drop-off depot for leaf and yard waste	Possible future concerns about the cost of leaf and yard waste collection and composting.	Mitigation not required	Possible future concerns about the cost of leaf and yard waste collection and composting.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting			
Door-to-door distribution of backyard composters to 80% of single family households Promotion of wermi-composters to multi-family units Large 3-bin composting units distributed to apartment and cooperative housing complexes	A proportion of residents in each municipality are willing to pay one-third the cost of backyard composters and appear willing to accept municipal expenditures for education/promotion. Uncertain of acceptance of higher cost, for composters or for those who have not purchased a composter.	Support promotion of composting with education of benefits.  Continue/increase subsidy for composters.	- A proportion of residents in each municipality are willing to pay one-third the cost of backyard composters and appear willing to accept municipal expenditures for education/promotion.  Uncertain of acceptance of higher cost, for composters or for those who have not purchased a composter.
Other Residential Waste Diversion (HHW, Toxic Taxi, Pitot Wet/Dry, White Goods Collection, White Goods Drop-Off, etc.)  Special curbside collections of Christmas trees Special and weekly curbside collections of white goods Drop-off depots for white goods Drop-off depots for white goods Permanent drop-off depot for HHW Special HHW drop-off days Toxic Taxi servec Mobile HHW depots	Uncertain of the willingness of municipalities to pay for white goods and HHW collection. Willing to pay for depots.	Region/Province to examine product stewardship for white goxds. Region/Province to examine effectiveness of HHW management, and examine possibilities for joint programs with private sector.	Muncipalities may be less willing to pay the cost of white goods pick up and HHW.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities  Centralized windrow composting of leaf and yard waste In-vessel composting of source separated organics Community composting	Region and residents continue to fund the leaf and yard waste composting facilities. In the longer term the higher costs of locating and operating a composting facility may become an issue for some people.	<ul> <li>Education program to address the benefits and the need for composting facilities.</li> </ul>	Region and residents continue to fund the leaf and yard waste composting facilities. In the longer term the higher costs of locating and operating a composting facility may become an issue for some people.
Reuse Centres and Activities  Municipal reuse centre  Private reuse centre  Non-profit reuse centre  Charitable reuse centres  Food reuse organization  Special goods exchange days	Some people are willing to purchase used goods. If centres become convenient and shopping experiences acceptable, more people may be willing to pay for used items.	Mitigation not required	Some people are willing to purchase used goods. If centres become convenient and shopping experiences acceptable, more people may be willing to pay for used items.
Public MRFs  · Processing centre for dry recyclables · Construct new or improve/expand existing MRFs	<ul> <li>Local government and residents appear willing to pay for the facilities provided subsidies continue.</li> </ul>	Mitigation to include government or private sector subsidies	Local government and residents appear willing to pay for the facilities provided subsidies continue.
Residential Recycling Depots and Transfer Stations  Drop-off depot for dry recyclable Depots located at transfer stations/landfills	<ul> <li>Local government and residents appear willing to pay for the facilities provided subsidies continue.</li> </ul>	<ul> <li>Mitigation to include government or private sector subsidies</li> </ul>	Local government and residents appear willing to pay for the facilities provided subsidies continue.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Promotion and Education			
Promotion/education program on Direct Cost system     Promotion/education program on source reduction/pre-cycling, reuse and recycling     3Rs promotion and education program     Consumer education program	program on continue to support this activity.  program on cycling, ducation  program	<ul> <li>Programs should be linked to a public consultation program to address the specific needs of each region.</li> </ul>	The Region and residents likely to continue to support this activity.



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### GENERIC COMPONENTS NET EFFECTS TABLE H10.1

: Social Acceptability MUNICIPALITY: GTA CRITERION

System: Residential Expanded Blue Box Indicipalities, IC&I Sector, Special and Sensitive Groups

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal			
Curbside collection of residential garbage from single family dwellings Collection of residential garbage from multi-family units Self haul of garbage Regional recycling legislation	. No effect	. No mitigation required	. No effect
Residential Recycling and Collection			
Curbside collection of Expanded Blue Box materials Expanding curbside collection Collection of bins of recyclables from multi-family units Drop-off depot for multi-family residents not serviced by recycling Drop-off depot for rural households Community recycling centres Engineered tecycling depot Recycling and multi-family buildings of greater than 6 units Blue Box recycling mandated	High participation rates but vary with municipality (Tavironics, 1990; Hay, ND). Greatest participation by single family residences (Gale, 1990; Environics, 1960; Hay, ND). Some groups (e.g., lower SES) and households potentially less acceptingwilling to participate (Lansana, 1992; Howenstine, 1993; Everett et al., 1992; Environics, 1990; Hay, ND). Will allow residents of multiplefamily residences the opportunity to participate resulting in an overall increase in participation.	To encourage apartment dwellers to participate use apartment committee and block volunteer approach (Bagby, 1993) and ensure distribution of etear information (Hager, 1992; Spaecarelli, 1980).  Work with apartment building owners/managers to develop most appropriate collection system (Von Mirbach, 1993; Hager, 1990).  Additional measures (e.g., block-leader approaches) may be needed to involve different ethnicities and lower SES groups (Bagby, Diangson and Patterson, 1992; Burn, 1993; Ewerett et al., 1992; Howenstine, 1993; Lansana, 1991; Hager, 1993).  Modify program as required to address concerns of elderly (Bagby, 1993).	Greater participation throughout residential sector with largest gains in multi-family, tower-income and ethnic groups.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Leaf and Yard Waste Collection		-	
Curbside collection of leaf and yard waste     Drop-off depot for leaf and yard waste	General acceptance of the collection although there is some confusion for the resident on how/when to place yard waste for pick up.  Drop-off of leaf and yard waste unlikely on a large scale due to inconvenience.	Spring, summer, and fall reminders to low density residences and apartment superintendents.	General acceptable of collection Drop-off will not be undertaken by many.
Residential Household Composting			
Backyard composter distribution programs Door to door distribution of backyard composters to 80% of single family households Promotion of vermicomposting to multi-family units Larga 3-bin composting units distributed to a	Residential composting participation is possible with those who have the facilities (Finvironies, 1990). It may be limited to physically mobile people with yard space. A high proportion of those with backyard composters use them.  Vermicomposting has not met with wide acceptance and appears to have low rates of participation.  Participation in community composting is uncertain.	Continue subsidies of units, provide home delivery and provide multi-lingual instruction for household composters. Support residents in multiple-family dwellings and support with promotion/education program and consultation program to define the best composting system for each building. Support community composting with strong education/promotion and back up with proper management and community involvement in operations.	Expanded participation household compositing in low, medium and high density residential areas.  Vermicompositing has not met with wide acceptance and appears to have low rates of participation. Participation in community compositing is uncertain.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Other Residential Waste Diversion (HHW, Toxic Taxi, Pilot Wet-Dry, White Goods Collection, White Goods Drop-off)			
Special curbside collections of Christmas trees     Special and weekly curbside collections of white goods     Drop-off depots for white goods     Special curbside collection for bulky items     Permanent drop-off depot for household hazardous waste (HIIW)	Residents of municipalities without white goods collection may not be willing/able to drop off white goods. Greater participation by individuals in pick-up services (eg. toxic taxis, mohile HHW depois, white goods collection).	Provide call-in pick-up service for white goods.	Increased participation by individuals, higher cost for municipalities for 3Rs.
Special household hazardous waste drop-off days     Toxic Taxi service     Mobile HHW depots			
Composting Facilities			
Centralized windrow composting of leaf and yard waste     In-vessel composting of source separated organics     Community composting	No effect	. Mitgation not required	· No effect
Reuse Centres and Activities			
Municipal reuse centre     Private reuse centre     Non-profit reuse centre	In short term increasing awareness of availability of reusable goods. Longer term demand for used soxids	Support with promotion/education program emphasising the benefits of reuse	Short term growth in shipping at reuse centres. Longer term
Charitable reuse centres     Food reuse organization     Special goods exchange days	uncertain.	Province to consider tax reduction (sales or income tax) for the purchase of used goods.	

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Public MRFs			
Processing centre for dry recyclables     Construct new MRF or improve/expand existing MRF	. No effect	Mitigation not required	· No effect
Residential Recycling Depots and Transfer Stations			
Drop-off depot for dry recyclables Depots located at transfer stations	. No effect	Mitigation not required	. No effect
Residential Promotion and Education			
Promotion/education program on Expanded Blue Box program Promotion/education program on source reduction/ pre-cycling/reuss/recycling 38s promotion and education program Consumer education program	Generally acceptable and important to maintaining and increasing participation. Indications from response to hot lines, etc. is that people want more information (Environies, 1990; Watson, 1993).	Expand and refine promotion/education programs as required based on changing demographics, ethnic/language groups (Bagby, Diangson, and Patterson, 1992).  Promotional/Education programs should be based on the successful programs identified in the 3Rs literature (e.g., Folz and Hazlett, 1990). For example, pamphites & brochures (in utility bills, etc.) and community information meetings.  The role of the schools could be critical, particularly for new Canadians whose children are receiving the only English instruction in the family. Many school boards have environmental education committees and the schools are increasingly being led by Principals and Vice-Principals with an environmental message.	Potentially positive effect through increased participation in 3Rs activities and changes to lifestyle.

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## GENERIC COMPONENTS NET EFFECTS TABLE H10.2

: Social Acceptability MUNICIPALITY: GTA CRITERION

System: Residential Expanded Blue Box Indicator: Attitudes and perception to 3Rs Activities

Components Category/Components	Potential Effects	Mitlgation/Enhancement	Component Net Effects
Garbage Collection and Disposat  Curbside collection of residential garbage from single family dwellings  Collection of residential garbage from multi-family units Self haul of garbage Regional recycling legislation	· No effect	· Mitigation not required	. No effect
Residential Recycling and Collection			
Curbside collection of Expanded Blue Box materials Expanding curbside collection Collection of bins of recyclables from multi-family units Drop-off depot for multi-family residents not serviced by recycling Drop-off depot for rural households Community recycling centres Engineered recycling centres Engineered recycling depot Recycling at all multi-family buildings of greater than 6 units Blue Box recycling mandated	Drop-off for multi family and single family not as convenient but acceptance dependent on location and hours of operation of depot.  Provision of recycling service to all apartiments over 6 units will provide long term support for 3Rs and should increase waste diversion.  Expanded blue box should make it easier for people to source separate by reducing the questions/concerns about which material goes in. Increases positive attitude to 3Rs.	Continue to support with promotion/education programs. Ensure convenience of system to maintain positive attitudes. Programs designed for specific community groups (i.e. sensitive to ethnic and language diversity) may lead to more positive attitudes. Positive attitudes toward recycling in multi-family buildings likely to be enhanced by allowing apartiment owners/managers to choose the system for their building.	Positive effect by maintaining or increasing positive attitudes to 3Rs.  Positive attitudes toward recycling in multi-family buildings likely to be enhanced by allowing apartment owners/managers to choose the system for their building.

Components Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Leaf and Yard Waste Collection			
Curbside collection of leaf and yard waste	<ul> <li>General acceptance of the collection, although there is some confusion for the</li> </ul>	<ul> <li>Spring, summer and fall reminders to low density residences and</li> </ul>	Could reduce the amount of composting of leaf and yard waste
Drop-off depot for leaf and yard     waste	resident on how/when to place yard waste for pick up. May reduce the	apartment superintendents.	done on-site.
	amount of back yard composting undertaken.  Unlikely that many residents will drop-		
	off leaf and yard waste.		
Residential Household Composting			
· Backyard composter distribution	· Acceptable for low density family	Provide promotion/education	General growth in positive
programs	households. Continued use and	program and consultation program	attitudes to 3Rs supported by
Door to door distribution of backyard	acceptance anticipated. Evidence of	for multi-tamily residences.	nouschold composting.  Potential for multi-family residents
composters to 80% of single family	acceptance for multi-family residents uncertain. Vermicomposting has not	composting will be enhanced,	to object to composting if odour,
Promotion of vermicomposting to	been accepted on a large scale;	provided the nuisance concerns (see	insect and rodent problems and
multi-family units	indications are that it may not be	Broad Social Impact) are mitigated.	health concerns persist.
· Large 3-bin composting units	accepted in the long term.		
distributed to apartment and	Attitudes to community composting		
cooperative housing complexes	uncertain.  Detection for multi family residents to		
	object to competing if odour insect		
	and rodent problems and health		
	concerns persist.		

Components Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Other Residential Waste Diversion (HHW, Toxic Taxi, Pilot Wet-Dry, White Goods Collection, White Goods Dropoff)			
Special curtiside collections of Christmas trees Special and weekly curbside collections of white goods	HHW collection and drop-off days have a positive effect as social awareness is created about household hazardous waste.	Ensure public consultation and participation to address concerns related to HHW.	<ul> <li>Potentially a positive attitudinal effect.</li> </ul>
Drop-off depots for white goods     Special curbside collection for bulky litems     Description off depot for permanent depot off depot for	Could be concerns regarding spills by the toxic taxi and mobile HHW depot, but generally people are familiar with HHW and accepting of its management.		
Ferniabrell unopportunity to the household hazardous waste (HHW)  Special household hazardous waste drop-off days  Towic Toxi connects	Possible concerns about the costs of providing toxic taxi service and white goods collection; there may be more economical wave of managing the		
Mobile HHIW depots	material.  Possible short-term concerns about reductions in white goods collection.		
Composting Facilities			
Centralized windrow composting of leaf and yard waste     In-vessel composting of source separated organics     Community composting	Existing facilities are likely to become less favourable if odour and health issues are not resolved in the near term. Greater environmental awareness among companies and employees practising composting (e.g. Campbells Soup).	Ensure public consultation and participation as part of the siting and monitoring process, and to address concerns related to existing composting facilities.	. No effect

Components Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Reuse Centres and Activities			
Municipal reuse centre     Private reuse centre     Non-profit reuse centre     Charitable reuse centres     Food reuse organization     Special goods exchange days	Positive, public and municipal attitudes; socially and environmentally beneficial. Should reinforce positive attitudes to the 3Rs.	· Mitgation not required	<ul> <li>Positive effect by reinforcing positive attitudes to the 3Rs.</li> </ul>
Public MRFs			
Processing centre for dry recyclables     Construct new MRF or     improve/expand existing MRF	Currently acceptable. Traffic, noise and litter issues may reduce the acceptability of some facilities, depending on location.	Address nuisance effects at existing facilities.	. No effect
Residential Recycling Depots and Transfer Stations			-
Drop-off depot for dry recyclables     Depots located at transfer stations	Encourages positive attitudes and perceptions that the individual/family can contribute to the solution.	Attitudes may be enhanced by informing residents as to the success of the program (Siebel, 1993).	Positive effect; encourages positive attitudes and perceptions that the individual/family can contribute to the solution.
Residential Promotion and Education			
Promotion/education program on Expanded Blue Box program Promotion/education program on source reduction/ precycling/reuse/recycling 3Rs promotion and education program Consumer education program	horease awareness of the need for and benefits of 3Rs. Will motivate people to participate.  Consumer education will promote change in shopping for changes in product design (durable, repairable) and packaging (reduction and recyclable).	Expand promotion and education programs. Province to assist with cost and planning if required.	Increase awareness of the need for and benefits of 3Rs. Will motivate people to participate. Consumer education could promote change in shopping behaviour and demand for changes in product design (durable, repairable) and packaging (reduction and recycle).

# TABLE H10.3 GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY: GTA
CRITERION: Social Acceptability

System: Residential Expanded Blue Box Indicator: Willingness to Pay

Commonent Category/Commonents	Potential Effects	Mitioation/Enhancement	Component Net Effects
component catcher)/ components	A CHILLIAN ENGLAS		
Garbage Collection and Disposal			
Curbside collection of residential garbage from single family dwellings     Collection of residential garbage from multi-family units     Self haul of garbage     Regional recycling legislation	· No effect	· Mitigation not required	· No effect
Residential Recycling and Collection			
· Curbside collection of Expanded Blue	Residents and municipalities are	The region could provide advice/audits	
Box materials	willing to pay part of the cost of	to apartment owners on the best and	In short term uncertain if tenants
Expanding curbside collection	operating the collection system.	lowest cost recycling opportunities.	and landlords are willing to
· Collection of bins of recyclables from	Uncertain if all municipalities in		assume additional costs for
multi-family units	region are willing to continue		recycling services.
Drop-off depot for multi-family	existing funding arrangements, or		<ul> <li>Uncertain if all municipalities in</li> </ul>
residents not serviced by recycling	willing to accept a reduction in		region are willing to continue
<ul> <li>Drop-off depot for rural households</li> </ul>	subsidies, or willing to take on extra		existing funding arrangements, or
· Community recycling centres	costs of expanded Blue Box.		willing to accept a reduction in
· Engineered recycling depoi	· Increased costs for Landlord of		subsidies, or willing to take on
<ul> <li>Recycling at all multi-family buildings</li> </ul>	providing recycling services likely to		extra costs of expanded Blue Box.
of greater than 6 units	be possed on to tenants in rent		
· Blue Box recycling mandated	increases. Willingness of tenants to		
	pay increased rent is unknown.		

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Leaf and Yard Waste Collection			
Curbside collection of leaf and yard waste Drop-off depot for leaf and yard waste	Possible future concerns about the cost of leaf and yard waste collection and composting.	· Mitigation not required	Possible future concerns about the cost of leaf and yard waste collection and composting.
Residential Household Composting Backyard composter distribution programs Door to door distribution of backyard composters to 80% of single family households. Promotion of vermicomposting to multi-family units Large 3-bin composting units	A proportion of residents in each municipality are willing to pay one-third the cost of backyard composters and appear willing to accept municipal expenditures for education/promotion. Uncertain of acceptance of higher cost, for composters or for those who have	Support promotion of composting with educational of benefits.     Continue/increase subsidy for composters.	A proportion of residents in each municipality are willing to pay one-third the cost of backyard compositers and appear willing to accept municipal expenditures for education/promotion. Uncertain of acceptance of higher cost, for compositers or for those who have
distributed to apartment and cooperative housing complexes	not purchased a composter.		not purchased a composier.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Other Residential Waste Diversion (HHW, Toxic Taxi, Pilot Wet-Dry, White Goods Collection, White Goods Drop-off)			
Special curbside collections of Christmas trees     Special and weekly curbside collections of white goods     Drop-off depots for white goods     Special curbside collection for bulky items	Uncertain of the willingness of municipalities to pay for white goods and HHW collection. Willing to pay for depots.	Region/Province to examine product stewardship for white goods. Region/Province to examine effectiveness of 11HW management, and examine possibilities for joint programs with private sector.	<ul> <li>Municipalities may be less willing to pay the cost of white goods pick- up and HHW.</li> </ul>
Permanent drop-off depot for household hazardous waste (HIW)     Special household hazardous waste drop-off days     Toxic Taxi service     Mobile HHW depots		•	
Composting Facilities			
Centralized windrow composting of leaf and yard waste     In-vessel composting of source separated organics     Community composting	Region and residents continue to fund the leaf and yard waste composting facilities. In the longer term the higher costs of locating and operating a composting facility may become an issue for some people.	Education program to address the benefits and the need for composting facilities.	Region and residents continue to fund the leaf and yard waste composting facilities. In the longer term the higher costs of locating and operating a composting facility may become an issue for some people.
Reuse Centres and Activities			
Municipal reuse centre     Private reuse centre     Non-profit reuse centre     Charitable reuse centres     Food reuse organization     Special goods exchange days	Some people are willing to purchase used goods. If centres become convenient and shopping experiences acceptable, more people may be willing to pay for used items.	· Mitigation not required	Some people are willing to purchase used goods. If centres become convenient and shopping experiences acceptable, more people may be willing to pay for used items.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Public MRFs			
Processing centre for dry recyclables Construct new MRF or improve/expand existing MRF	Local government and residents appear willing to pay for the facilities provided subsidies continue.	<ul> <li>Private sector or province to continue subsidies</li> </ul>	Local government and residents appear willing to pay for the facilities provided subsidies continue.
Residential Recycling Depots and Transfer Stations			
<ul> <li>Drop-off depot for dry recyclables</li> <li>Depois located at transfer stations</li> </ul>	<ul> <li>Local government and residents appear willing to pay for the facilities provided subsidies continue.</li> </ul>	Private sector or province to continue subsidies	<ul> <li>Local government and residents appear willing to pay for the facilities provided subsidies continue.</li> </ul>
Residential Promotion and Education			
Promotion/education program on Expanded Blue Box program     Promotion/education program on     source reduction/ pre- cycling/reuse/recycling     . 3Rs promotion and education program     Consumer education program	Local government and residents likely to continue to support this activity.	<ul> <li>Programs should be linked to a public consultation program to address the specific needs of each region.</li> </ul>	Local government and residents likely to continue to support this activity.

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### GENERIC COMPONENTS NET EFFECTS TABLE H11.1

MUNICIPALITY: GTA

CRITERION

: Social Acceptability

System : Residential Wet/Dry Individuals, Municipalities, IC&I Sector, Special and Sensitive Groups

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects	
Garbage Collection and Disposal				
Curbside Collection of residential garbage from single family dwellings in three streams Collection of residential garbage from multi-family units in three streams	Recycling legislation forces participation in the short-term although some residents will not support it. In the longer term likely to become acceptable.	- Mitigation not required	Recycling legislation forces participation in the short term although some residents will not support it. In the longer term likely to become acceptable.	
<ul> <li>Self haul of garbage</li> <li>Regional recycling legislation</li> </ul>				

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection			
· Provide carts to all single family	Wet/Dry systems require more extensive	· Promotion/education and public	Wet/Dry systems require high
households	participation than traditional Blue	consultation programs would be	levels of commitment by
· Separation of waste into three	Boxes. When people do not participate	absolutely essential to ensuring high	participants to prevent
streams	in Blue Box programs, there is the loss	levels of participation and adequate	contamination of wet and dry
· Drop-off depot for multi-family	of potential recyclables. With a wet/dry	sorting on the part of residents. These	streams. The highest levels of
residents not serviced by recycling	system, if participation is not extensive	efforts should be targeted in particular	participation and commitment
· Drop-off depot for rural	enough, there is a strong likelihood of	to non-participating groups and	are most likely in single-family
households	contamination of either the wet or dry	residences subject to higher turnover.	residences because of low
	stream. If contamination is too high it	<ul> <li>Ensure the provision of convenient</li> </ul>	turnover and greater amounts of
	can seriously jeopardise the compost	systems designed for various types of	storage space than multiple-
	quality and become a costly sorting	residences. Work with apartment	family residences.
	exercise (Taylor, 1993).	building owners/managers to develop	
8	· If the Wet/Dry system is not convenient	most appropriate collection system	
	for persons in various types of	(Von Mirbach, 1993; Hager, 1990).	
	residences, participation may be very	<ul> <li>Additional measures (e.g., block-leader</li> </ul>	
	low.	approaches) may be needed to involve	
	With an aging population, the elderly	different ethnicities and lower SES	
	may have some difficulties in	groups (Bagby, Diangson and	
	participating in the program.	Patterson, 1992; Burn, 1991; Everett, et	
	Will allow residents of multiple-family	al., 1992; Howenstine, 1993; Lansana,	
	dwellings the opportunity to participate,	1991; Hager, 1992).	
	resulting in an overall increase in	<ul> <li>Modify program as required to address</li> </ul>	
	participation. Although uncertain of	concerns of elderly (Bagby, 1993).	
	applicability to multiple residence		
	buildings.		

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection (continued)  Provide carts to all single family households Separation of waste into three streams Drop-off depot for multi-family residents not serviced by recycling Drop-off depot for rural households	It is difficult to predict the participation rate in Wet/Dry program achieved 62% dwer/Dry program achieved 62% dwersion of the residential waste stream (Cty of Guelph, 1991). However, the project comprised fewer than 1000 residences, primarily single-family dwellings and with extensive promotion and education (Cty of Guelph, 1991). Guelph is unlike the GTA in that it is more ethinically homogenous. Guelph officials believe that residents are inclined to participate because of strong environmental and rural roots (Siebel, 1993). All these characteristics probably lead to the conclusion that Guelph's participation rate would be higher than the GTA.		
Residential Leaf and Yard Waste Collection			
Seasonal separate collection of leaf and yard waste     Drop-off depot for leaf and yard waste	<ul> <li>General acceptance of the collection although there is some confusion for the resident on how/when to place yard waste for pickup.</li> <li>Drop-off of leaf and yard waste unlikely on a large scale due to inconvenience.</li> </ul>	Spring, summer, and fall reminders to low-density residences and apartment superintendents.	General acceptance of collection.  Drop-off will not be undertaken by many.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Household Composting			
· Door-to-door distribution of backvard composters to 80% of	Residential composting participation is possible with those who have the	Continue subsidies of unit, provide home delivery and provide multi-	Expanded participation in household composting low,
single family households	facilities (Environics, 1990). It may be	lingual instruction for household	medium and high density
Large 3-bin composting units	limited to physically mobile people with	composters.	residential areas.
distributed to apartment and co-	yard space. A figh proportion of those with backward composters use them	dwellings with promotion/education	with wide acceptance and
Vermi-composting for multi-family	Vermicomposting has not met with wide	program and consultation program to	appears to have low rates of
households	acceptance and appears to have low	define the best composting system for	participation.
	rates of participation.	each building.	· Participation in community
	<ul> <li>Participation in community composting</li> </ul>	Support community composting with	composting is uncertain.
	is uncertain.	strong education/promotion and back	
		up with proper management and	
•		community involvement in operations.	
Other Residential Waste Diversion (HHW, Toxic Taxi, Pilot Wet/Dry, White Goods Collection, White Goods Drop-Off, etc.)			
· Special curbside collections of	· Residents of municipalities without	· Provide call in pick up service for	· Increased participation by ·
	white goods collection may not be	bulky items and white goods.	individuals; higher cost for
· Special and weekly curbside	willing/able to drop off white goods.	Monitor the wet stream for HHW	municipalities for 3Rs.
collections of white goods	Greater participation by individuals in	contamination. Emphasize HHW	
Drop-off depots for white goods     Special currected collection for bulby	pick-up services (e.g., toxic taxis, mobile HHW/denote white goods and hulty	services in education/promotion.	
items	items collection).		
Permanent drop-off depot for	· If HHW collection or depot is not		
HHW	convenient, it may lead to HHW in the		
Special HHW drop-off days	wet or dry streams with potentially		
Toxic Taxi service	serious effects on the compost quality		
· Mobile HHW depots	(Taylor, 1993).		

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities			
Central composting facilities (invessel or windrow) for composting of source separated household organic (wet stream)     Centralized windrow composting of leaf and yard waste	<ul> <li>Municipalities may be hesitant to participate in Wet/Dry systems because of potentially higher costs associated with sorting the various streams.</li> </ul>	<ul> <li>Proper sorting by the majority of citizens is essential.</li> </ul>	<ul> <li>Municipalities may be hesitant to participate in Wet/Dry systems because of potentially higher costs associated with sorting the various streams.</li> </ul>
Reuse Centres and Activities			
Municipal reuse centre     Private reuse centre     Non-prolit reuse centre     Charitable reuse centres     Foxd reuse organization     Special goods exchange days	In short term increasing awareness of availability of reusable goods. Longer term demand for used goods uncertain.	<ul> <li>Support with promotion/education program emphasizing the benefits of reuse.</li> <li>Province to consider tax reduction (sales or income tax) for the purchase of used goxds.</li> </ul>	Short term growth in shopping at reuse centres. Longer term uncertain.
Public MRFs			
New MRI <sup>+</sup> or improve/expand existing MRI <sup>+</sup> to process larger dry stream of recyclable	Municipalities may be hesitant to participate in Wet/Dry systems because of potentially higher costs associated with sorting the various streams.	Proper sorting by the majority of citizens is essential.	Municipalities may be hesitant to participate in Wet/Day systems because of potentially higher costs associated with sorting the various streams.
Residential Recycling Depots and Transfer Stations			
Drop-off depot for dry recyclable Depots located at transfer stations/landfills	. No effect	Mitigation not required	. No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Promotion and Education			
• Promotion/education program for	Generally acceptable and important to	Promotion/education and public	Potentially positive effect through
Promotion/education program for	. Implementation of Wet/Dry City-wide	essential to ensuring high levels of	increased participation.
source reduction/pre-cycling, reuse	program will require a high level of	participation and adequate sorting on	
and recycling	personal contact with the public and a	the part of residents. Implementation	
· 3Rs promotion and education	very direct monitoring and feedback	of a Wet/Dry system requires a	
program	system (Hoornweg, Otten and Wong,	significant altering of attitudes and	
· Consumer education program	1993).	behaviours on the part of citizens.	
	. Ongoing consultation with the public is	These efforts should be targeted in	
	essential (Siebel, 1993).	particular to non-participating groups	
		<ul> <li>and residences subject to higher</li> </ul>	
		turnover.	

# GENERIC COMPONENTS NET EFFECTS TABLE H11.2

MUNICIPALITY: GTA CRITERION

: Social Acceptability

System: Residential Wet/Dry Indicator: Attitudes and Perceptions to 3RS Activities

Component Category/Components	Potential Effects	Mitlgation/Enhancement	Component Net Effects
Garbage Collection and Disposal			-
Curbside Collection of residential garbage from single family dwellings in three streams Collection of residential garbage from multi-family units in three streams Self haul of garbage Self haul of garbage	· No effect	· Mitigation not required	· No effect

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection			
Provide carts to all single family	· Initially, there will be extensive	· Extensive promotion/education and	· There is no data on a North
households	questions about the purpose and	public consultation programs will be	American wet/dry system in medium
Separation of waste into three	methods of the wet/dry system (Siebel,	essential to achieving needed levels	to high density urban areas. There is
streams	1993).	of participation and correct sorting	likely to be some opposition to the
Drop-off depot for multi-family	Many people may consider the wet/dry	behaviour.	implementation of a wet/dry system
residents not serviced by recycling	System as a technological fix to	<ul> <li>Ensure convenience of system to</li> </ul>	from building owners, managers and
· Drop-off depot for rural	society's waste problem. Other	maintain positive attitudes.	residents because of costs and
households	jurisdictions have not implemented	<ul> <li>Programs designed for specific</li> </ul>	nuisance effects. Some concerns may
	wet/dry systems because they don't	community groups (i.e. sensitive to	be addressed by developing various
	actively force people to think about the	ethnic and language diversity) may	alternative systems for large
	3Rs, only about source separation	lead to more positive attitudes.	apartments or arranging for more
	(Von Mirbach, 1993).		frequent removal.
	· Probably acceptable for low-density		<ul> <li>Probably unacceptable in multi-</li> </ul>
	development, provided system is		family buildings.
	understood and convenient.		· Residents, in particular elderly an
	Possibly unacceptable for high-density		disabled may not accept Wet/Dry if
	development. The need to source		inconveniences such as odour, waste
	separate in a bin system may cause		sticking to bin and moving 90 gallon
	significant odours in individual		bins in winter are extensive.
	apartments and buildings.		
	Building owners and managers may		
	view the Wet/Dry System as		
	unacceptable because of the potential		
	for vermin, insects, odours, hygiene		
	concerns and potential cost.		
	· Residents, in particular elderly an		
	disabled may not accept Wet/Dry if		
	inconveniences such as odour, waste		
	sticking to bin and moving 90 gallon		
	UIIIS III WIIIICI AIC CAICIISIAC.		

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Leaf and Yard Waste Collection			
Seasonal separate collection of leaf and yard waste     Drop-off depot for leaf and yard waste	General acceptance of the collection, although there is some confusion for the resident on how/when to place yard waste for pick up. May reduce the amount of backyard composting undertaken.  Unlikely that many residents will dropoff leaf and yard waste.	<ul> <li>Spring, summer and fall reminders to low density residences and apartment superintendents.</li> </ul>	Could reduce the amount of composing of leaf and yard waste done on-site.
Residential Household Composting			
Door-to-door distribution of backyard composters to 80% of single family households Large 3-bin compositing units distributed to apartment and cooperative housing complexes. Vermi-composting for multi-family households	Acceptable for low density family households. Continued use and acceptance anticipated. Evidence of acceptance for multi-lamily residents uncertain. Vermicompositing has not been accepted on a large scale; indications are that it may not be accepted in the long term. Potential for multi-family building residents to object to composting if odour, insect and rodent problems and health concerns are prevalent.	Positive attitudes towards compositing will be enhanced, provided the nuisance concerns (see "Broad Social Impact, Potential for Lifestyle Effects") are mitigated.	General growth in positive attitudes to 3Rs supported by household composting.  Potential for multi-family residents to object to composting if odour, insect and redent problems and health concerns are prevalent.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Other Residential Waste Diversion (IIIIW, Toxic Taxi, Pilot Wet/Dry, White Goods Collection, White Goods Drop-Off, etc.)			
Special curbside collections of Christmas trees Special and weekly curbside collections of white goods Drop-off depots for white goods Special curbside collection for bulky items Permanent drop-off depot for HIIW Special HHW drop-off days Toxic Taxi service Mobile HHW depots	HHW collection and drop-off days have a positive effect as social awareness is created about household hazardous waste.  Could be concerns regarding spills by toxic taxi and mobile HHW depot, but generally people-are familiar with HHW and accepting of its management.  Possible concerns about the costs of providing toxic taxi service and white goods collection; there may be more economical ways of managing the material.  Possible short-term concerns about reductions in white goods collection.	Ensure public consultation and participation to address concerns related to HHW.	Potentially a positive attitudinal effect
Composting Facilities  Central composting facilities (invessel or windrow) for composting of source separated household organic (wet stream)  Centralized windrow composting of leaf and yard waste	Existing facilities are likely to become less favourable if odour and health issues are not resolved in the near term. The addition of increased amounts of "wet" waste from the Wet/Dry System may aggravate the problem.  Greater environmental awareness among companies and employees praetising composting (e.g. Campbells Soup).	Ensure public consultation and participation as part of the sting and monitoring process, and to address concerns related to existing composting facilities.	Existing facilities are likely to become less favourable if odour and health issues are not resolved in the near term. The addition of increased amounts of "wet" waste from the Wet/Dry System may aggravate the problem.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Reuse Centres and Activities			
<ul> <li>Municipal reuse centre</li> <li>Private reuse centre</li> </ul>	<ul> <li>Positive, public and municipal attitudes; socially and environmentally</li> </ul>	Mitigation not required	<ul> <li>Positive effect by reinforcing positive attitudes to the 3Rs.</li> </ul>
Non-profit reuse centre     Charitable reuse centres	beneficial. Should reinforce positive attitudes to the 3Rs,		
<ul> <li>Food reuse organization</li> <li>Special goods exchange days</li> </ul>			
Public MRFs			
New MRF or improve/expand	Currently acceptable; traffie, noise and	Address nutsance effects at existing	· No effect
existing MRF's to process larger dry stream of recyclable	litter issues may reduce the acceptability of some facilities,	lacilities	
	depending on location.		
Residential Recycling Depots and Transfer Stations			
Drop-off depot for dry recyclable	· Encourages positive attitudes and	Attitudes may be enhanced by	· Positive effect; encourages positive
Depois located at transfer stations/landfills	perceptions that the individual/family can contribute to the solution.	informing residents as to the success of the program (Siebel, 1993).	attitudes and perceptions that the individual/family can contribute to
			the solution.

	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Promotion and Education			
Promotion/education program for Incre     wel/dry system bene	• Increase awareness of the need for and Paroal Stroad expansion of promotion and Penefits of 31s and the WerlDry education programs including	Broad expansion of promotion and	<ul> <li>Increase awareness of the need for and benefits of 3Rs and Wet/Doc</li> </ul>
	em.	telephone "hotlines".	Will motivate people to participate.
source reduction/pre-cycling, reuse The	The public will need extensive		Will educate people on how to
and recycling infor	information, education and consultation		participate in a constructive fashion.
and education	on the Wet/Dry System (Objectives,		
	Methods, Participation, etc.).		
r education program	Consumer education will promote		
chan	change in shopping for changes in		
brod	product design (durable, repairable)		
and	and packaging (reduction and		
recy	recyclable).		

### SA.WIP

# GENERIC COMPONENTS NET EFFECTS TABLE H11.3

: Social Acceptability MUNICIPALITY: GTA CRITERION: Social

System: Residential Wet/Dry Indicator: Willingness to Pay

Component Category/Components	Potential Effects	Mitigation/Enhancement - · ·	Component Net Effects
Garbage Collection and Disposal		5	, ,
· Curbside Collection of residential	· No effect	Mitigation not required	No effect
dwellings in three streams			,
<ul> <li>Collection of residential garbage from multi-family units in three</li> </ul>			
streams			
Self haul of garbage     Regional recycling legislation			• >

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection  Provide carts to all single family households Separation of waste into three streams Drop-off depot for multi-family residents not serviced by recycling Drop-off depot for rural households	Residents and municipalities have been willing to pay part of the costs of operating the traditional Blue Box system. Uncertain if all municipalities in region are willing to continue existing funding arrangements or willing to accept reduction in subsidies. Willingness of municipalities to accept the costs of the wet/dry system is unknown because of lack of data on wet/dry. However, the capital costs may be significant (sorting facilities, trucks for 3 streams, 3 bins/household, etc.)  If the wet/dry system is costly to apartment owners/managers, there will be resistance to pay. As the costs of the wet/dry system are unknown, the effect is unknown.	The region could provide advice/audits to apartment owners on the best and lowest cost Wet/Dry System.	If the wet/dry system is costly to apartment owners/managers, there will be resistance to pay. As the costs of the wet/dry system are unknown, the effect is unknown.  The willingness of municipalities to pay the costs of the wet/dry system are unknown. Municipalities may be hesitant to participate in wet/dry system because of potentially higher costs.
Residential Leaf and Yard Waste Collection  Seasonal separate collection of leaf and yard waste  Drop-off depot for leaf and yard waste	Additional costs of leaf and yard waste collection and composting are currently acceptable to residents, but costs may become an issue in the future.	· Mitigation not required	Additional costs of leaf and yard waste collection and composting are currently acceptable to residents, but costs may become an issue in the future.

Component Category/Components	Potential Effects	Mitigation/Enbancement	Component Net Effects
Residential Household Composting  Door-to-door distribution of backyard composters to 80% of single family households  Large 3-bin composting units distributed to apartment and cooperative housing complexes  Vermi-composting for multi-family households	A proportion of residents in each municipality are willing to pay one-third the cost of backyard composters and appear willing to accept municipal expenditures for education/promotion. Uncertain of acceptance of higher costs, for composters or for those who have not purchased a composter.	· Support promotion of composting.	A proportion of residents in each municipality are willing to pay one-third the cost of backyard composters and appear willing to accept municipal expenditures for education/promotion. Uncertain of acceptance of higher costs, for composters or for those who have not purchased a composter.
Other Residential Waste Diversion (HHW, Toxic Taxi, Pilot Wet/Dry. White Goods Collection, White Goods Drop-Off, etc.)  Special curbside collections of Christmas trees Special and weckly curbside collections of white goods Drop-off depots for white goods Special curbside collection for bulky items Permanent drop-off depot for HHW Special HHW drop-off days Toxic Taxi service Mobile HHW depots	Uncertain of the willingness to pay for white goods and HHW collection. Willing to pay for depots.	Region/Province to examine product stewardship for white goods. Region/Province to examine effectiveness of HHW management, and examine possibilities for joint programs with private sector.	Muncipalities may be less willing to pay the cost of white goods and HHW pick up.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Composting Facilities  Central composting facilities (inverse) or windrow) for composting of source separated household organic (wet stream)  Centralized windrow composting of leaf and yard waste	Region and residents continue to fund the existing leaf and yard waste composing facilities. If household "wet" waste is to be added, there will be a need for increased capacity and therefore increased capacity and residents may be unwilling to pay these costs.	<ul> <li>Education program to address the benefits and the need for composting facilities.</li> </ul>	Region and residents continue to fund the existing leaf and yard waste composting facilities. If household "wet" waste is to be added, there will be a need for increased capacity and therefore increased costs. Regions and residents may be unwilling to pay these costs.
Reuse Centres and Activities  Municipal reuse centre  Private reuse centre  Non-profit reuse centre  Charitable reuse centres  Food reuse organization  Special goods, exchange days	Some people are willing to purchase use goods. If centres become convenient and shopping experiences acceptable, more people may be willing to pay for used items.	· Mitigation not required	Some people are willing to purchase used goods. If centres become convenient and shopping experiences acceptable, more people may be willing to pay for used items.
Public MRFs  New MRF or improve/expand existing MRF's to process larger dry stream of recyclable	Local governments and residents appear willing to pay for the facilities. If household "dry" waste is to be sorted, there will be a need for increased capacity and sorting capability and therefore increased costs. Regions and residents may be unwilling to pay these costs.	<ul> <li>Education program to address the benefits and the need for recycling facilities.</li> </ul>	Local governments and residents appear willing to pay for the facilities. If household "dry" waste is to be sorted, there will be a need for increased capacity and increased sorting capability and therefore increased costs. Regions and residents may be unwilling to pay these costs.

Component Category/Components Poten	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling Depots and Transfer Stations			
Drop-off depot for dry recyclable     Depots located at transfer     stations/landfills     sor     sor     sor     sor     inc	Local governments and residents appear willing to pay for the facilities. If household "dry" waste is to be sorted, there will be a need for increased capacity and increased sorting capacity and therefore increased costs. Regions and residents may be unwilling to pay these costs.	Education program to address the benefits and the need for recycling facilities.	- Local governments and residents appear willing to pay for the facilities. If household "dry" waste is to be sorted, there will be a need for increased capacity and increased sorting capability and therefore increased costs. Regions and residents may be unwilling to pay these costs.
Residential Promotion and Education  Promotion/education program for lixwey/dry system  Promotion/education program for source reduction/pre-cycling, reuse and recycling  3Rs promotion and education program  Consumer education program	Local government and residents are likely to support this activity.	Programs should be linked to a public consultation program to address the specific needs of each region.	• Local government and residents likely to continue to support this activity.







# GENERIC COMPONENTS NET EFFECTS TABLE H12.1

: Social Acceptability MUNICIPALITY: GTA CRITERION

System: Residential Mixed Waste Processing Indicator: Participation in 3R's by Individuals, Municipalities, IC&I Sector, Special and Sensitive Groups

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal			
· Curbside Collection of residential	. No effect	· Mitigation not required	· No effect
garoage from single family dwellings  Collection of residential garbage from			
multi-family units			
· Self haul of garbage			
Regional recycling legislation			
· Drop-off depot for rural households			

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Recycling and Collection			
Curbside collection of Blue Box	· High participation rates but vary with	To encourage apartment dwellers to	Potentially greater participation
materials Expanding curbside collection	municipality (Environics, 1990; 11dy, ND).	participate use apartment committee and block volunteer approach	throughout residential sector with largest gains in multi-family, lower
· Collection of bins of recyclables from	· Greatest participation by single family	(Bagby, 1993) and ensure distribution	socio-economic and ethnic groups.
multi-family units	residences (Gale, 1990; Environics,	of clear information (Hager, 1992;	Some residents are likely to decide
Drop-off depot for multi-family residents not serviced by recycling	1990; Hay, ND).  Some groups (e.g. fower SES) and	Spaccarelli, 1990).  Work with apartment building	not to source separate some or all of their recylables and food waste
· Community recycling centres	households potentially less	owners/managers to develop most	knowing that it will be separated
· Recycling at all multi-family buildings	accepting/willing to participate	appropriate collection system (Von	for them at the central Mixed
of greater than 6 units	(Lansana, 1992; Howenstine, 1993;	Mirbach, 1993; Hager, 1990).	Waste Processing and Composting
Blue Box recycling mandated	Everett et al., 1992; Environics, 1990;	<ul> <li>Additional measures (e.g., block-</li> </ul>	facility.
· Engineered recyeling depot	Hay, ND).	leader approaches) may be needed	<ul> <li>Mixed waste processing conflicts</li> </ul>
· Drop-off depot for rural households	<ul> <li>Will allow residents of multiple-family</li> </ul>	to involve different ethnicities and	with a philosophy of personal
	residences the opportunity to	lower SES groups (Bagby, Diangson	involvement in 3Rs; some
	participate resulting in an overall	and Patterson, 1992; Burn, 1991;	municipalities may not want to be
	increase in participation.	Everett et al., 1992; Howenstine,	involved on that basis.
	· Some residents are likely to decide not	1993; Lansana, 1991; Hager, 1992).	
	to source separate some or all of their	Modify program as required to	
	recyclables and food waste knowing	address concerns of elderly (Bagby,	
	that it will be separated for them at	1993).	
	the central Mixed Waste Processing		
	and Composting facility.		
	<ul> <li>Mixed waste processing conflicts with</li> </ul>		
	a philosophy of personal involvement		
	in 3Rs; some municipalities may not		
	want to be involved on that basis.		

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Leaf and Yard Waste Collection			
Curbside collection of leaf and yard waste     Drop-off depot for leaf and yard     waste	General acceptance of the collection although there is some confusion for the resident on how/when to place yard waste for pick up.  Drop-off of leaf and yard waste unlikely on a large scale due to inconvenience.	Spring, Summer, and Fall reminders to low density residences and apartment superintendents.	General acceptable of collection Drop-off will not be undertaken by many.
Residential Household Composting			
Door-to-door distribution of backyard composters to 80% of single family households     Large 3-bin composting units distributed to apartment and cooperature housing complexes     Verm-composting for multi-family households.	Residential composting participation is possible with those who have the facilities (Environies, 1990). It may be limited to physically mobile people with yard space. A high proportion of those with backyard composters use them.  Vermicomposting has not met with wide acceptance and appears to have low rates of participation.  Participation in community composting is uncertain.	Continue subsidies of units, provide home delivery and provide multilingual instruction for household composters.  Support residents in multiple-family dwellings and support with promotion/education program and consultation program to define the best composting system for each building.  Support community composting with strong education/promotion and back last rong education/promotion and back up with proper management and community involvement in operations.	Expanded participation household composting in low, medium and high density residential areas.  Vermicomposting has not met with wide acceptance and appears to have low rates of participation.  Participation in community composting is uncertain.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Other Residential Waste Diversion (HHW, Toxic Taxi, Pilot Wet/Dry, White Goods Collection, White Goods Drop-Off, etc.)			
Special curbside collections of Christmas trees Special and weekly curbside collections of white goods Drop-off depots for white goods Special curbside collection for bulky stores	Residents of municipalities without white goods collection may not be willing/able to drop off white goods.     Greater participation by individuals in pick-up services (eg. toxic taxis, mobile HHW depots, white goods collection).	Provide call-in pick-up service for white goods.	Increased participation by individuals; higher cost for municipalities for 3Rs.
Perinanent drop-off depot for HHW Special HHW drop-off days Toxic Taxi service Mobile HHW depots			
Composting Facilities			
Centralized windrow composting of leaf and yard waste     In-vessel composting of source separated organics     New mixed waste processing and composting facility	Municipalities may be hesitant to participate in Mixed Waste Processing systems because of potentially higher costs of this system.	· Mitigation not required	No effect
Reuse Centres and Activities			
Municipal reuse centre     Private reuse centre     Non-profit reuse centre     Charitable reuse centres     Food reuse organization     Special goods exchange days	In short term increasing awareness of availability of reusable goods. Longer term demand for used goods uncertain.	Support with promotion/education program emphasising the benefits of reuse.  Province to consider tax reduction (sales or income tax) for the purchase of used goods.	Short term growth in shipping at reuse centres. Longer term uncertain.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Public MRFs			
· Processing centre for dry recyclables	· No effect	Mitigation not required	· No effect
Residential Recycling Depots and Transfer Stations	-		
Drop-off depot for dry recyclables Depots located at transfer stations	No effect	Mitigation not required	. No effect
Residential Promotion and Education			
Promotion/education program for source reduction/pre-cycling, reuse and recycling     3Rs promotion and education program     Consumer education program	Generally acceptable and important to maintaining and increasing participation. Indications from response to hot lines, etc. is that people want more information (Environics, 1990)(Watson, 1993).	Expand and refine promotion/education programs as required based on changing demographics, ethnic/language groups (Bagby, Diangson, and Patterson, 1992).  Promotional/Education programs should be based on the successful programs identified in the 3Rs literature (e.g., Folz and Hazlett, 1990). For example, pamphiles & brochures (in utility bills, etc.) and community information meetings. The role of the schools could be critical, particularly for new Canadians whose children are receiving the only English instruction in the family. Many school boards have environmental education committees and the schools are increasingly being led by Principals and Vice-Principals with an environmental message.	Potentially positive effect through increased participation in 3Rs activities.



# TABLE H12.2 GENERIC COMPONENTS NET EFFECTS

MUNICIPALITY: GTA
CRITERION: Social Acceptability

System: Residential Mixed Waste Processing Indicator: Attitudes and perception to 3Rs Activities

Components Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal			
Curbside Collection of residential garbage from single family dwellings     Collection of residential garbage from multi-family units     Self haul of garbage     Regional recycling legislation     Drop-off depot for rural households	· No effect	· Mitigation not required	· No effect
Residential Recycling and Collection			
Curbside collection of Blue Box materials  Expanding curbside collection  Collection of bins of recyclables from multi-family units  Drop-off depot for multi-family residents not serviced by recycling  Community recycling centres  Recycling at all multi-family buildings of greater than 6 units  Blue Box recycling depot  Engineered recycling depot	Drop-off for multi family and single family not as convenient but acceptance dependent on location and hours of operation of depot.  Provision of recycling service to all apartiments over 6 units should provide long term support for 3Rs and should increase waste diversion. In particular if apartiment owners/managers are able to choose the system for their building.	Continue to support with promotion/education programs. Ensure convenience of system to maintain positive attitudes. Programs designed for specific community groups (i.e. sensitive to ethnic and language diversity) may lead to more positive attitudes.	Provision of recycling service to all apartments over 6 units should provide long term support for 3Rs and should increase waste diversion. In particular if apartment owners/managers are able to choose the system for their building.

Components Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Leaf and Yard Waste Collection			
Curbside collection of leaf and yard waste	General acceptance of the collection, although there is some confusion for the	Spring, summer and fall reminders to low density residences and	Could reduce the amount of composting of leaf and yard waste
Drop-off depot for leaf and yard waste	resident on how/when to place yard waste for pick up. May reduce the	apartment superintendents.	done on-site.
	amount of back yard composting		
	undertaken.  Unlikely that many residents will drop- off leaf and yard waste.		
Residential Household Composting	0		
Door-to-door distribution of backyard	· Acceptable for low density family	Provide promotion/education	· General growth in positive attitudes
composters to 80% of single family	households. Continued use and	program and consultation program	to 3Rs supported by household
households	acceptance anticipated. Evidence of	for multi-family residences.	composting.
distributed to enarment and co.	acceptance for multi-family residents	composting will be enhanced.	· Potential for multi-family residents
operative housing complexes	been accepted on a large scale;	provided the nuisance concerns	to object to composting if odour,
· Vermi-composting for multi-family	indications are that it may not be	(see Broad Social Impact) are	insect and rodent problems and
households	accepted in the long term.	mitigated.	health concerns persist.
	<ul> <li>Potential for multi-family residents to</li> </ul>		
	object to composting if odour, insect		
	and rodent problems and health		
	concerns persist.		

Components Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Other Residential Waste Diversion (IIIIW, Toxic Taxi, Pilot Wet/Dry, White Goods Collection, White Goods DropOff, etc.)			
Special curbside collections of Christmas trees Special and weekly curbside collections of white goods Drop-off depoits for white goods Special curbside collection for bulky items Permanent drop-off depot for IIIIW Special IIIIW drop-off days Toxic Taxi service Mobile IIIIW depots	<ul> <li>HIIW collection and drop-off days have a positive effect as social awareness is created about household hazardous waste.</li> <li>Could be concerns regarding spills by the toxic taxi and mobile HIIW depot, but generally people are familiar with HIIW and accepting of its management.</li> <li>Possible concerns about the costs of providing toxic taxi service and white goods collection; there may be more economical ways of managing the material.</li> <li>Possible short-term concerns about reductions in white goods collection.</li> </ul>	Einsure public consultation and participation to address concerns related to HHW.	Potentially a positive attitudinal effect
Composting Facilities			
Centralized windrow composting of leaf and yard waste. In-vessel composting of source separated organics. New mixed waste processing and composting facility	Existing facilities are likely to become less favourable if odour and health issues are not resolved in the near term.  Greater environmental awareness among companies and employees practising composting (e.g. Campbells Soup).	Ensure public consultation and participation as part of the siting and monitoring process, and to address concerns related to existing composting facilities.	Existing facilities are likely to become less favourable if odour and health issues are not resolved in the near term.     Mixed waste composting may lead to very negative attitudes and perceptions.

Components Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Reuse Centres and Activities  Municipal reuse centre  Private reuse centre  Non-profit reuse centre  Charitable reuse centre  Food reuse organization  Special goods exchange days	Positive public and municipal attitudes; socially and environmentally beneficial. Should reinforce positive attitudes to the 3Rs.	· Mitigation not required	<ul> <li>Positive effect by reinforcing positive attitudes to the 3Rs.</li> </ul>
Public MRFs  Processing centre for dry recyclables	<ul> <li>Currently acceptable. Traffic, noise and litter issues may reduce the acceptability of some facilities, depending on location.</li> </ul>	<ul> <li>Address nuisance effects at existing facilities.</li> </ul>	· No effect
Residential Recycling Depots and Transfer Stations  Drop-off depot for dry recyclable  Depots located at transfer stations	<ul> <li>Encourages positive attitudes and perceptions that the individual/family can contribute to the solution.</li> </ul>	<ul> <li>Attitudes may be enhanced by informing residents as to the success of the program (Siebel, 1993).</li> </ul>	<ul> <li>Positive effect: encourages positive attitudes and perceptions that the individual/family can contribute to the solution.</li> </ul>
Residential Promotion and Education  Promotion/education program for source reduction/pre-cycling, reuse and recycling  Rs promotion and education program  Consumer education program	Increase awareness of the need for and benefits of 3Rs. Will motivate people to participate. Consumer education will promote change in shopping for changes in product design (durable, repairable) and packaging (reduction and recyclable).	Expand promotion and education programs.	Increase awareness of the need for and benefits of 3Rs. Will motivate people to participate.     Consumer education will promote change in shopping for changes in product design (durable, repairable) and packaging (reduction and recycle).

# GENERIC COMPONENTS NET EFFECTS TABLE H12.3

MUNICIPALITY: GTA CRITERION

: Social Acceptability

System: Residential Mixed Waste Processing Indicator: Willingness to Pay

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Garbage Collection and Disposal			
· Curbside Collection of residential garbage from single family	· No effect	· Mitigation not required	. No effeet
dwellings  Collection of residential garbage from multi-family units			-
Self haul of garbage     Regional recycling legislation     Drop-off depot for rural households	•		
Residential Recycling and Collection			
· Curbside collection of Blue Box materials	<ul> <li>Residents and municipalities are willing to pay part of the cost of</li> </ul>	The region could provide advice/audits to apartment owners on	
Expanding curbside collection	operating the collection system.	the best and lowest cost recycling	In chart term uncertain if tenants and
<ul> <li>Collection of bins of recyclables</li> </ul>	Uncertain if all municipalities in	opportunities.	landlords are willing to assume
from multi-family units	region are willing to continue existing		additional costs for recycling services.
Drop-off depot for multi-family	funding arrangements or willing to		Residents and municipalities are
residents not serviced by recycling	accept a reduction in subsidies.		willing to pay part of the cost of
<ul> <li>Community recycling centres</li> </ul>	Increased costs for Landlord of		operating the collection system.
<ul> <li>Recycling at all multi-family</li> </ul>	providing recycling services likely to		manufe management at the state of the state
buildings of greater than 6 units	be passed on to tenants in rent		
<ul> <li>Blue Box recycling mandated</li> </ul>	increases. Willingness of tenants to		
<ul> <li>Engineered recycling depot</li> </ul>	pay increased rent is unknown.		
· Drop-off depot for rural households			

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Residential Leaf and Yard Waste Collection			
Curbside collection of leaf and yard waste     Drop-off depot for leaf and yard waste	Possible future concerns about the cost of leaf and yard waste collection and composting and the willingness of residents and municipalities to pay for collection and composting.	· Mitigation not required	Possible future concerns about the cost of leaf and yard waste collection and composting and the willingness of residents and municipalities to pay for collection and composting.
Residential Household Composting			
Door-to-door distribution of backyard composters to 80% of single family households Large 3-bin composting units distributed to apartment and cooperative housing complexes Vermi-composting for multi-family households	A proportion of residents in each municipality are willing to pay one-third the cost of backyard composters and appear willing to accept municipal expenditures for education/promotion. Uncertain of acceptance of higher cost, for composters or for those who have not purchased a composter.	Support promotion of composting with educational of benefits. Continue/increase subsidy for composters.	A proportion of residents in each municipality are willing to pay one-third the cost of backyard composters and appear willing to accept municipal expenditures for education/promotion. Uncertain of acceptance of higher cost, for composters or for those who have not purchased a composter.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Other Residential Waste Diversion' (IIIIW, Toxic Taxi, Pilot Wet/Dry, White Goods Collection, White Goods Drop-Off, etc.)			-
Special curbside collections of Christmas trees     Special and weekly curbside collections of white goods     Drop-off depots for white goods     Special curbside collection for bulky items     Permanent drop-off depot for HHW     Special HIW drop-off days     Toxic Taxi service     Mobile HHW depots	<ul> <li>Uncertain of the willingness of municipalities to pay for white goods and HHW collection. Willing to pay for depois.</li> </ul>	Region/Province to examine product stewardship for white goxds. Region/Province to examine effectiveness of HHW management, and examine possibilities for joint programs with private sector.	Municipalities may be less willing to pay the cost of white goods pick up and HHW.
Composting Facilities			
Centralized windrow composting of leaf and yard waste     Drop-off depot for leaf and yard waste	Region and residents continue to fund the leaf and yard waste composting facilities. In the longer term the higher costs of locating and operating a composting facility may become an issue for some people.	- Education program to address the benefits and the need for composing facilities.	Region and residents continue to fund the leaf and yard waste composting facilities. In the longer term the higher costs of locating and operating a composting facility may become an issue for some people.
Reuse Centres and Activities			
Municipal reuse centre     Private reuse centre     Non-profit reuse centre     Charitable reuse centres     Food reuse organization     Special goods exchange days	Some people are willing to purchase used goods. If centres become convenient and shopping experiences acceptable, more people may be willing to pay for used items.	Mitigation not required	Some people are willing to purchase used goxds. If centres become convenient and shopping experiences acceptable, more people may be willing to pay for used items.

Component Category/Components	Potential Effects	Mitigation/Enhancement	Component Net Effects
Public MRFs	•		
Processing centre for dry recyclables	<ul> <li>Local government and residents appear willing to pay for the facilities provided subsidies continue.</li> </ul>	Subsidies from private sector or government	Local government and residents appear willing to pay for the facilities provided subsidies continue
Residential Recycling Depots and Transfer Stations			
Drop-off depot for dry recyclables     Depots located at transfer stations	Local government and residents appear willing to pay for the facilities provided subsidies continue.	Subsidies from private sector or government	Local government and residents appear willing to pay for the facilities provided subsidies continue
Residential Promotion and Education	· 3		
Promotion/education program for source reduction/pre-cycling, reuse and recycling  3Rs promotion and education program	<ul> <li>Local government and residents likely to continue to support this activity.</li> </ul>	<ul> <li>Programs should be linked to a public consultation program to address the specific needs of each region.</li> </ul>	<ul> <li>Local government and residents likely to continue to support this activity</li> </ul>

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